

Parental Beliefs as Predictors of
Children's Externalizing
Behaviors

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ABSTRACT

The relationship between maternal beliefs about children's externalizing behaviors (EB) and the frequency of their children's EB was investigated. The sample of 71 consisted of two groups of mothers of children between 8-12 years of age. The Clinic group consisted of 35 mothers of children referred to a Children's Clinic due to externalizing behavior problems. The School group consisted of 36 mothers of children attending elementary school. Mothers completed questionnaires measuring parental beliefs and the frequency of their children's EB. Results showed that mothers' endorsement of authoritarian parenting was positively related to children's EB scores. A U-shaped relationship was found between mothers' relationship-centered goals and children's EB scores. Parent-centered goals and children's EB scores were positively correlated only in the clinic group. Mothers' hostile attribution scores were positively related to their children's EB scores in both groups. Mothers with low perceived parenting scores were associated with higher children's EB scores in both groups. Overall, results revealed potential clinical implications. Parenting programs that change parenting goals, attributions, and

sense of parenting control, which in turn influences parenting behavior, may influence the frequency of their children's externalizing behaviors.

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Parental Beliefs as Predictors of Children's Externalizing Behaviors

Introduction

The everyday responsibilities of being a parent present many challenges and one of the most difficult tasks is deciding how to respond to children's externalizing behaviors (Perozynaki & Kramer, 1999; Smetana, 1995; Suarez & Baker, 1997). Externalizing behavior problems are comprised of two general domains of behavior: aggression and delinquency (Achenbach, Howell, Quay, & Conners, 1991). Aggressive behavior includes acts of verbal and physical aggression. Delinquency includes conduct problems, such as lying, cheating, stealing, and truancy. Externalizing behaviors have evoked a great deal of attention from developmental researchers (Goodnow, 1988; Hastings & Grusec, 1998; Rubin & Mills, 1990, 1998), since such behaviors have been associated with a plethora of difficulties.

Rubin and Mills (1990) reported that externalizing behaviors, such as aggression, are manifestations of social incompetence. Social competence involves the ability to successfully maintain mutually satisfying relationships with people across a variety of settings (Rubin & Rose-Krasnor, 1992).

Eisenberg, Fabes, and their colleagues found that socially competent children are less likely than their peers to become involved in angry conflicts (Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, Friedman, Poulin, & Maszk, 1997). Morison and Masten (1991) found that socially competent behavior in childhood results in peer acceptance and successful adolescent outcomes. Social competence is conducive to normal social and emotional growth and well being (Rubin & Mills, 1990).

Children who tend to exhibit externalizing behaviors appear to have deficits in understanding the perspectives, feelings and intentions of others (Dodge, 1986; Rubin, Bream, & Rose-Krasnor, 1991), which underlie socially competent behaviors. Such deficits in social interaction leave the children at risk for impaired social development and may predict poor psychological adjustment over the longer term (Ladd & Burgess, 1999; see review by Parker, Rubin, Price, & DeRosier, 1995). Further, externalizing behaviors are interpersonally destructive and longitudinally relatively stable (Olweus, 1979). A keen interest of developmental researchers has been to identify the variables that contribute to externalizing behaviors in children.

Why study Beliefs?

Mills (1999), McGillicuddy-DeLisi (1992) and Grusec, Goodnow, and Kucyznski (2000) have identified some of the varied mix of variables that contribute to children's social outcomes. For example, the temperament of the child, personality characteristics of the child and parent, goodness of fit between parent and child disposition, economic class of the family, financial and/or family stressors, and culture are all examples of variables that at least partially contribute to children's social outcomes. It also has been shown that mothers are generally more tolerant of externalizing behaviors of boys than girls (Hastings & Coplan, 1999; Mills & Rubin, 1992).

The interaction between parent and child is complex, which makes it difficult to fully predict child outcomes. Developmental researchers, however, have indicated a need to understand more fully the relationship between parental beliefs and the social development of children (Grusec et al., 2000; Hastings & Coplan, 1999). Parental beliefs represent the psychological framework utilized by parents to understand and interpret their children's behaviors across a variety of settings (Goodnow, 1988).

Parental influences on children's development have long been a compelling subject for researchers. However,

for many years, investigators emphasized the discernment of relationships between cognitive, psychosocial, and physical-motor development of particular behaviors demonstrated by parents and their children (McGillicuddy-Delisi, 1992). In recent years, there has been a burgeoning interest among researchers in parental beliefs and their effect on the social development of children.

Goodnow (1988) aptly captured the essence of this rejuvenated cognitivistic position: "To focus only on a behavior ignores the fact that parents are thinking creatures who interpret events and whose interpretations influence their actions and feelings" (p.287). From this line of reasoning, the study of the impact of parental beliefs on child social development is warranted because the beliefs, through their effects on the behavior of the parents, affect the child. That is, beliefs are intimately related to the manner in which the parent interacts and behaves with the child, which, in turn, may affect the child's development (Rubin & Mills, 1992).

Emerging empirical findings show parental beliefs, ideas, and perceptions concerning child social development contribute to the development of socially competent and socially incompetent behaviors in childhood (Goodnow, 1988; Rubin & Mills, 1990, 1992).

Rubin and Mills (1990, 1998) also have emphasized the significance of parental beliefs for understanding the socialization process and have highlighted the need to clarify the relations among parental beliefs, parenting behaviors, and child social outcomes. Preliminary investigations are interesting in that they suggest that parents have developed complex belief systems about children's social development (Hastings & Grusec, 1998; Rubin, Mills & Rose-Krasnor, 1989).

In the present study, I will examine the beliefs of mothers with children identified with externalizing behavioral difficulties and the belief systems of mothers with children from the general population. Four specific maternal beliefs will be measured and correlated with their children's externalizing behaviors. The maternal beliefs to be measured include the following: a) specific strategies mothers believe that they would use in responding to externalizing behaviors by their children; b) goals held when interacting with their children; c) causal attributions, which are explanations parents may have regarding why a behavior may have occurred; and d) perceived control when parenting their children. Each of the maternal beliefs have been examined within child developmental research.

Beliefs about Parenting

Many developmental researchers (e.g., Baumrind, 1971; Buri, 1989; 1991) have identified an interest in parental behaviors and strategies that are used to deal with their children's behaviors. This attention has highlighted a growing awareness of the lack of data about the beliefs that may influence those strategies (Dix, 1992; Dix & Grusec, 1985; Rubin & Mills, 1992).

As is the case with the examination of parenting styles, the exploration of child-rearing beliefs has often employed the basic distinction between authoritative, authoritarian, and permissive. The model of parenting, which is one of the most influential, was developed by Baumrind (1967, 1971). According to Baumrind, authoritarian beliefs involve an emphasis on controlling and rejecting the child, utilization of power-assertive and inconsistent disciplinary strategies, obedience, and little verbal exchange between parent and child. Permissive or uninvolved parenting belief systems, on the other hand, represent a low-power style of relating to children. There is lack of structure and expectations for the child, over-permissiveness, avoidance in recognizing both positive and negative social behaviors, and a reliance on indirect or no-response strategies.

Baumrind's third category represents the authoritative belief system, which encourages verbalization of ideas from children, nurturance, democratic decision-making, and autonomy, along with consistent, predictable and firm limits and boundaries. Parental beliefs about parenting are associated with different child social development outcomes (Grusec & Goodnow; 1994; Rubin, Stewart & Chen, 1995).

Children of authoritative parents tend to be socially competent and responsible and exhibit positive relationships with adults and peers (Baumrind, 1967, 1971). The authoritative parenting style predicts the development of mature moral reasoning and prosocial behavior. In contrast, parents who believe in the use of authoritarian or permissive parenting styles are likely to have children who are socially incompetent (Baumrind, 1967, 1971; Lamborn et al., 1991).

Numerous researchers have discussed the link between high power assertive parenting techniques and children with externalizing behavioral difficulties (Conger et al., 1992; Dodge, Bates, & Petit, 1992; Rubin & Mills, 1992). In general, these studies showed that parents who are physically punitive and discipline their children in an inconsistent manner have children with externalizing behaviors, such as aggression.

Concurrently, it has been reported that permissive, unresponsive or undercontrolling parenting is significantly associated with childhood externalizing behaviors (Petit & Bates, 1989; Rubin, Mills, & Rose-Krasnor, 1989). In fact, Olweus (1980) found that maternal permissiveness of aggression was the best predictor of child aggression. Rubin and Mills (1992) found that mothers of aggressive children tended to select indirect or no-response strategies more frequently than mothers of average children. The essential characteristics of the categories (high-power parenting strategies versus low-power parenting strategies) were the same as the ones in Baumrind's model.

In summary, it appears that mothers of children with externalizing behavioral difficulties differ from mothers of socially competent children in the ways in which they believe they would react to their children's display of externalizing behaviors. Parental beliefs in authoritative strategies predict social competence, while parental beliefs in authoritarian and permissive strategies predict social incompetence, particularly externalizing behavioral difficulties.

Beliefs about Parental Goals

Parenting goals are the outcomes that parents hope to achieve while they are interacting with their children (Hastings & Grusec, 1998). Hastings and Grusec (1998) also noted that parenting goals may vary across time and contexts. Parenting goals have been cited as pivotal in determining parenting strategies (Dix, 1992; Kuczynski, 1984). Research, to date, has indicated that parental goals may be powerful contributors to understanding individual differences in parenting.

As discussed above for parenting strategies, different parental behaviors are associated with different child social outcomes. The reasons why different parents use different strategies in similar situations (Sigel, 1992) or why the same parent uses different strategies across different child rearing situations has been less well understood (Hastings & Grusec, 1998).

It logically follows that if two parents have two different goals, then their actions and strategies also would be different. If a parent's goal is immediate child compliance and another parent's goal is to maintain a warm mutual relationship, then the parents' strategies in a given encounter may be different. For example, in a situation where a child refuses to help his mother wash the

dishes, a parent-centered mother (goal is immediate compliance) may ground the child immediately. On the other hand, a relationship-centered mother (goal is relationship) may sit down with the child and explain the importance of helping each other in the family and that chores is one way of showing that they care about one another.

Kuczynski (1984) showed that parents who wanted to attain goals focused on their own needs, such as obtaining compliance from their children, used power assertive techniques. These mothers did not negotiate, compromise or show warmth. However, the opposite was found when parents were focused on attaining the relationship-centered goals of maintaining a close parent-child relationship.

Hastings and Grusec (1998) conducted three studies specifically examining parental goals and the consequences of these goals during interactions with their children. Parenting goals were categorized to vary on two dimensions: immediacy of concern (short term vs. long term) and center of concern (parent, child, or relationship). The results indicated that the center of concern was predictive of parenting behavior. When parents were primarily concerned with relationship-centered goals, they exhibited behaviors that were the most responsive and the least dominating. In contrast, parent-centered goals

were associated with power assertive techniques, especially when immediate compliance was desired. When parents focused on child-centered concerns, they tended to use reasoning and avoid dominating.

Hastings and Grusec (1998) were the first researchers to show how parenting goals varied by the nature and setting of the children's misdeeds. For example, parents demonstrated a greater concern for goals related to discipline when children were described as having an outburst in public. Yet, the same parents were more focused on strengthening the parent-child relationship and promoting child happiness when the child's outburst was connected to jealousy of perceived preferential treatment of a sibling.

Parents also expressed stronger relationship-centered goals when conflicts occurred at home, while short-term parent-centered goals were more likely when in public settings. This is consistent with the notion that parents adapt their goals to match both the nature and setting of their children's misbehaviors. It also was found that mothers were more likely than fathers to focus on relationship-centered goals.

Hastings and Coplan (1999) showed that when mothers' parenting goals were appropriate for the misbehavior,

teachers reported that their children were least likely to engage in externalizing behaviors. Hastings and Coplan (1999) hypothesized that mothers' concern for parent-centered goals would positively predict externalizing difficulties in preschool. However, externalizing behavior problems in preschool children was evident only for the children of mothers who were highly focused on relationship-centered goals, rather than parent-centered goals. Mothers who tended to be solely relationship-centered appeared to have fostered children's selfishness and inability to appreciate the other person's perspective. Therefore, relationship-centered goals, in excess, predicted children's externalizing behaviors in preschool, rather than parent-centered goals, as expected.

An overemphasis on relationship-centered goals appears to give children the message that their own happiness and well-being is the most important consideration, despite the negative outcomes of their behaviors on others. As Hastings and Coplan (1999) noted, a focus on relationship-centered goals may underlie the kinds of permissive parenting that has previously been connected with externalizing behaviors (Baumrind, 1971). Several developmental researchers recently have noted the need to further investigate the relation between parenting goals,

parenting behaviors, and child's social outcomes (Grusec, Goodnow, & Kuczynski, 2000; Hastings & Coplan, 1999; Hastings & Grusec, 1998).

It also had been demonstrated that parents' goals may vary depending on the context of the parent-child interaction (Hastings & Coplan, 1999; Hastings & Grusec, 1998). Mothers who had a balanced focus on the mother-child relationship quality and recognized when to stop misbehaviors had children who showed the greatest social competence. These mothers displayed the ability to be appropriately adaptive and flexible, as well as firm and kind. When mothers had not acquired this kind of balance, they were more likely to utilize the "right" goals at the "wrong" times or vice versa. A parent may react harshly and firmly unnecessarily with a child, therefore, making the child feel misunderstood and angry. For example, a parent may become harsh and punitive because his or her child refuses to clean up the television room and then discovers that the child has a high fever and is not feeling well.

Beliefs about Causal Attributions

Attribution theorists posit that parents' appraisals of the nature and causes of children's behavior predict

parental affective responses and parenting strategies (Bugental & Shennum, 1984; Dix & Grusec, 1985; MacKinnon-Lewis, Lamb, Arbuckle, Baradaran, & Volling, 1992; Nix, Pinderhughes, Dodge, Bates, Pettit, & McFayden-Ketchum, 1999). Accordingly, attribution theory predicts that parental responses and affects depend on whether the parent believes that a behavior is a reflection of the child's stable disposition or a transitory age-related phase.

It has been found that when a parent believed that a child's aggressive behavior was a function of an internal trait, more power-assertive punitive responses were utilized than when aggressive behavior was believed to be externally caused (accidental, provoked or transitory) (Dix, Ruble, & Zambarano, 1989). Nix et al. (1999) demonstrated that mothers who had hostile attributions (negative dispositional and/or negative internationality), assessed prior to children's entry into kindergarten, were more likely to have children with externalizing behavioral difficulties when they entered school than mothers with non-hostile attributions. Dix (1993) reported that children tend to internalize views of self that are consistent with the attributions made by their parents, which may contribute to the frequency of externalizing behaviors.

In addition, it has been demonstrated that hostile attributions tend to elicit stronger emotions of anger and feelings that parental intervention is necessary than non-hostile attributions (Dix, Ruble, & Zambarano, 1989; Nix et al., 1999). Results showed that mothers' hostile attribution tendencies and children's externalizing behaviors at school were mediated by mothers' harsh discipline practices.

This is consistent with previous research findings that maternal anger predicted the use of high power strategies in response to externalizing behaviors, such as aggression (Grusec, Dix, & Mills, 1982; Rubin, Mills, & Rose-Krasnor, 1989). Further, mothers not only tended to react emotionally to their children's externalizing behaviors but they also interpreted them with hostile attributions.

Dix and his colleagues (1986, 1989) found that mothers interpreted externalizing behaviors as more intentional and dispositional in older than in younger children. Mills and Rubin (1992) conducted a longitudinal study that found as children grew older mothers became less likely to attribute externalizing behaviors to external temporary causes.

Interestingly, Mills and Rubin (1992) also showed that although the externalizing behaviors increasingly elicited

feelings of anger and frustration, the parents concurrently reported favouring low-power strategies in dealing with the behaviors. It was suggested that this may be more likely as children became older (Mills & Rubin, 1992).

Rubin and Mills (1990) showed that mothers of children with externalizing behaviors tended to attempt to cognitively normalize their children's behavior despite the fact that it made them quite angry. It appeared that less direct strategies were utilized in dealing with the externalizing behaviors in order to avoid confrontation and lessen the parents' feelings of internal anxiety, especially as their children became older. While previous findings (Grusec, Dix, & Mills, 1982; Rubin, Mills & Rose-Krasnor, 1989) found that maternal anger predicted high power strategies in response to externalizing behaviors, more recent findings (Bugental & Johnston, 2000; Mills, 1999) have noted that mothers tended to use high power strategies only when they perceived themselves with a power advantage.

Research conducted by Bugental and her colleagues (Bugental, Lyon, Lin, McGrath, Bimbela, 1999b; Bugental, Blue, & Cruzcosa, 1989; Bugental, Lyon, Krantz, Cortez, 1997) showed that mothers with low-power schemas

interpreted an extremely wide range of situations that potentially involve conflict or challenge as threatening.

Beliefs about Attributions and Low Perceived Power

There is a considerable amount of research, to date, regarding the basic human need for a sense of control, which is defined as a sense of interacting effectively with the environment (Bandura, 1977; Rotter, 1966, 1990; Skinner, 1995). As a result of repeated experiences of powerlessness in social interaction, a generalized belief may develop that an individual has little power to control interactions. This belief results in either the seeking of control or the relinquishment of control as a method of regaining a sense of control (Rothbaum, Weisz, & Snyder, 1982).

Bugental, Blue & Lewis (1990) conducted a study in which mothers briefly interacted with their own or unrelated children. Mothers with low perceived power schemas tended to be overly reactive and easily interpreted interactions with their children with negative evaluation and reacted with negative affect. Mothers with low perceived power reported feeling more annoyance toward children's externalizing behaviors than those with moderate or high-perceived power.

Mothers with low-power schemas are highly attuned to the opportunities available to gain some sense of control (Bugental, Brown, & Reiss, 1996; Bugental & Lewis, 1998; Bugental, Blue, & Cruzcosa, 1989). As Mills (1999) noted, mothers with low perceived power schemas tended to exert excessive force when interacting with their children when they found themselves with a power advantage. Therefore, these mothers tend to be over reactive when an opportunity is seen to dominate (over-react to a benign situation) and avoidant when the conflict is threatening, which ultimately lends itself to an inconsistent polarized style of reacting to children's behaviors.

Consistent with this perspective, mothers with low perceived power are not necessarily reacting to the situation itself but instead to a schema-consistent response pattern (Bugental & Lewis, 1998). This pattern may include a negatively biased view of the motives of their children's behaviors, whether externalizing or not. This pattern facilitates confusing communications, in which a seemingly benign situation may be responded to with high power assertive strategies. These mothers' emotional reactions, as communicated through their body language, are not necessarily congruent with the situation (Bugental et al., 1989). For example, a child may accidentally break a

glass and the mother may become extremely angry, punitive, and accusatory (e.g., concluding the act was deliberate). Communication ambiguity demonstrated by parents often confuses children due to its poor signal clarity. Poor signal clarity, in itself, represents a key characteristic of ineffective socialization processes (Grusec & Goodnow, 1994).

The role of parental perceived control in child development has received increasing empirical examination (Campis, Lyman, & Prentice-Dunn, 1986; Hagekull, Bohlin, & Hammarberg, 2001; Hastings & Coplan, 1999). Partly based on Rotter's (1966) concept of locus of control, Campis et al. (1986) developed the Parental Locus of Control Questionnaire (PLCQ), which measures parents' locus of control when parenting their children. The construct of parental locus of control is yet another parental cognition that influences parenting behavior and, subsequently, their children's social development (Hagekull et al. 2001; Janssens, 1994).

The PLCQ measures the degree to which parents make internal versus external attributions or perceived loci of control. Parents with an external parenting locus of control tended to attribute children's development to variables that are outside of the parent's control (e.g.,

child's disposition), while parents with an internal parenting locus of control regard their actions as influential in the development of their children. Parents with an internal locus of control to parenting perceive their children's misbehaviors as provoked, accidental or transitory.

Hagekull et al. (2001) showed that parental internal perceived control was associated with fewer externalizing behavior problems with their children and more social competence. Mothers who endorsed an authoritative parenting style expressed more perceived control than other mothers, which is consistent with the findings by Bugental et al. (1989).

Findings by Hagekull et al. (2001) and Bugental et al. (1989; 1990; 1997; 1998; 1999a) consistently indicated that mothers' low perceived power (external locus of control) has been associated with children's externalizing problem behaviors. Mothers with an external locus of control tend to attribute their children's behaviors as outside of their influence (e.g., child's personality). Nix et al. (1999) and Dix et al. (1989) showed that when mothers believed that aggressive behaviors were a function of the child's personality, anger and frustration were often elicited. These mothers also were more likely to have negative affect

in child-rearing situations and make negative evaluations of their children's externalizing behaviors than mothers with an internal parenting locus of control (Grusec, Dix, & Mills, 1982; Rubin, Mills, & Rose-Krasnor, 1989).

Limitations of the Current Literature

It is necessary to examine more fully the relationship between parenting beliefs, behaviors, and children's social development (Hastings & Grusec, 1998; Mills, 1999; Rubin & Mills, 1998). In particular, parenting goals have only recently been examined in relation to children's social outcomes. Hastings and Grusec (1998) emphasized the need for more research on parental goals, in order to more fully understand why there are individual differences in parenting goals across various settings.

This study was an important extension of previous studies of children's social development in several respects. First, with few exceptions, researchers have focused their attention on preschool children. To date, less is known about the relationship between parental beliefs and the social development of children in middle childhood, as they enter grade school and progress through elementary school (Ladd & Burgess, 1999).

In addition, this study was among the few projects of parental beliefs that draw from clinical populations. Traditionally, researchers have observed or rated non-clinical samples of children in terms of aggressiveness and then related these indices with measures of parental beliefs (McGillicuddy-Delisi, 1992; Rubin & Mills, 1992). The clinical sample consisted of mothers of children with behavioral and emotional difficulties that have intensified to the point of requiring professional assistance.

Summary

In this thesis study, it was generally expected that each of the parental beliefs discussed above (parenting, goals, and attributions) would uniquely add variance predicting children's externalizing scores. In addition, mothers' scores for perceived control also were examined, with an expected relationship between mothers' perceived control and children's externalizing behaviors. This was expected especially among those mothers who tend to make hostile attributions.

First, each of the parental beliefs was examined individually. Following the separate analyses of the parental beliefs, an overall model was examined, which included all of the parental beliefs.

The sample consisted of two groups of children between the ages of 8 and 12 years. The first group consisted of mothers of children identified as experiencing externalizing behavioral difficulties referred to a Children's Mental Health Clinic. The second group consisted of a group of mothers of children from the general population. This sample was recruited from mothers of children attending school through the Niagara District School Board. The two groups were analyzed separately and also together for the purpose of data analysis in order to obtain a wide range of externalizing behaviors.

Hypotheses

1. Beliefs about parenting style.

a. It was hypothesized that mothers' endorsement of authoritarian parenting style would be positively related to the frequency of their children's externalizing behaviors.

b. It also was expected that mothers' endorsement of permissive parenting style would be positively related to the frequency of their children's externalizing behaviors.

c. Mothers' endorsement of authoritative parenting style was expected to be negatively related to their children's externalizing behavior scores.

2. Beliefs about parenting goals.

a. It was hypothesized that there would be a curvilinear relationship between mothers' endorsement of parent-centered goals and their children's externalizing behavior scores.

b. A curvilinear relationship was expected between mothers' endorsement of relationship-centered goals and their children's externalizing behavior scores.

c. It was hypothesized that mothers' endorsement of a balance between relationship-centered goals and parent-centered goals would be negatively correlated with their children's externalizing behavior scores.

3. Parental attributions.

It was hypothesized that mothers' tendency to make hostile attributions about their children's externalizing behaviors would be positively related to children's externalizing behavior scores.

4. Parental attributions and perceived locus of control.

It was hypothesized that mothers' belief in external parenting locus of control would be positively related to

children's externalizing behaviors, especially among those mothers who tend to make hostile attributions.

5. The overall model.

It was hypothesized that mothers' beliefs (parent-centered goals, relationship-centered goals, goals balance, attribution, and parental control scores) each would add unique variance predicting children's externalizing scores, over and above mothers' endorsement of parenting style (authoritarian, authoritative, and permissive).

Method

Recruitment

The mothers were recruited from two separate sources, after the approval of the Brock University Research Ethics Board (see Appendix D for a copy of REB approvals). The first group of participants consisted of 35 mothers, whose children were referred by themselves or their family physician to a Children's Mental Health Clinic due to emotional/behavioral difficulties.

When a child was referred to the Children's Clinic for service, it was the Clinic's regular policy and procedure to assess whether the child met the initial criteria (between the age of 3-17 years and experiencing severe emotional/behavioral difficulties). Based on a brief

description of the child's problems, the Clinic's administrative assistant determined whether the initial criteria were met. Once this was verified, one of the Clinic's social workers conducted an intake with the parents to collect information about the family's social/emotional history and to obtain a detailed description of the child's problems.

Following each intake, the Children's Clinic staff reviewed the information and collectively decided if the family did in fact meet the criteria for acceptance of service. If accepted, the family received a letter in the mail confirming the Clinic's decision to provide service. Otherwise, the family was re-referred to a more appropriate community agency or program.

This study's information letters (Appendixes A1), consent forms (Appendixes A2), and questionnaire booklets (Appendixes C1-C5) were distributed to the three social workers at the Children's Clinic by this researcher. The social workers reviewed the distributed information and agreed to recruit participants following each of their intakes with a child's parent (both fathers and mothers were invited to participate).

Following each intake, the social workers provided the parent(s) with this study's information letter and consent

form. If the parent agreed to participate, the social worker provided a questionnaire booklet. Only one questionnaire booklet was permitted per family.

Participants were given the option of completing the questionnaire booklet at the Children's Clinic (in a private office) or taking it home and mailing it to the researcher (paid postage was provided).

During a five-week period, 38 mothers agreed to participate and 5 mothers and 1 father declined. Five of the participants took the questionnaire booklets home to complete and 2 participants mailed them back. Thirty-three participants completed the questionnaire booklets at the Children's Clinic, which provided a total of 35. Of those participants, the completed questionnaire booklets were returned to the intake social worker or the clinic's secretary. Typically, these booklets were picked up daily by the researcher.

A letter of appreciation and a \$2.00 Tim Horton's Gift Certificate were provided (personally or by mail) as a token of appreciation following the return of the completed questionnaire booklet (see Appendix A3).

The second group of participants consisted of 36 mothers of children between the ages of 8-12 years, who were recruited from a school in the Niagara District Board

of Education. The principal of the school distributed information letters and consent forms to the teachers, who then distributed them to the children in their classes to take home to their parents (see Appendix B1 & B2). Upon the return of signed consent forms, teachers sent home the questionnaire booklets (Appendix C1-C5) for the mothers to complete. Consistent with the clinic group, only one questionnaire booklet was permitted per family.

Participants had the choice of returning the sealed questionnaire booklets to the teacher or mailing it directly to the researcher (postage paid envelopes were offered). None of the participants requested a postage paid envelope. A total of 40 questionnaire booklets were distributed and 36 were returned to the school completed. Typically, the researcher picked up the completed booklets daily. Like the clinic group, letters of appreciation and \$2.00 Tim Horton gift certificates were then provided as a token of appreciation (see Appendix B3 & B4).

Participants

The frequency distributions of this study's mothers' demographic characteristics are depicted in Tables 1 and 3.

Table 1

Demographic Characteristics of Participating Mothers

Variables	No.	%
Marital:		
Combined:		
Married/common-law	61	85.9
Separated/divorced/widow	7	9.9
Single, never married	3	4.2
Total	71	100.0
Clinic:		
Married/common-law	26	74.3
Separated/Divorced	6	17.1
Single, never married	3	8.6
Total	35	100.0
School:		
Married/common-law	35	97.2
Separated/Divorced	1	2.8
Single, never married	0	0
Total	36	100.0
Completed Education:		
Combined:		
Elementary and high school	38	53.5
College or equivalent	25	35.2
University	8	11.3
Total	71	100.0

Note. Table 1 continued on next page

Table 1 continued

Demographic Characteristics of Participating Mothers

Variables	No.	%
Clinic:		
Elementary and high school	24	68.6
College or equivalent	9	25.7
University	2	5.7
Total	35	100.0
School:		
Elementary and high school	14	38.9
College or equivalent	16	44.5
University	6	16.7
Total	36	100.0

The frequency distributions of the participating mothers' children, as reported by mothers on the Demographic Questionnaire (Appendix C1), are depicted in Tables 2 and 3. None of the mothers identified their children as having difficulties with autism, attention deficit disorder (ADD) or having a developmental delay or a head injury.

Table 2

Demographic Characteristics of Children

Variables	No.	%
Gender:		
Male	34	47.9
Female	37	52.1
Total	71	100.0
Grade: Combined:		
2	8	11.3
3	4	5.6
4	9	12.7
5	17	23.9
6	21	29.6
7	10	14.1
No Response	2	2.8
Total	71	100.0
Grade Clinic:		
2	8	22.9
3	4	11.4
4	8	22.9
5	6	17.1
6	4	11.4
7	5	14.3
Total	35	100.0

Note: Table 2 continues on the following page

Table 2 Continued

Demographic Characteristics of Children

Variables	No.	%
School Grade:		
2	0	0.0
3	0	0.0
4	1	2.8
5	11	30.6
6	17	47.2
7	5	13.9
No Response	2	5.6
Total	36	100.0
Reported Difficulties:		
Central Auditory Processing		
Clinic:	5	14.3
School:	1	2.8
Learning Disabilities		
Clinic	1	2.9
School:	0	0.0
Attention Deficit Hyperactivity Disorder (ADHD)		
Clinic:	15	42.9
School:	0	0.0
Speech Disability		
Clinic:	1	2.9
School:	0	0.0

Note. n=71 (clinic n=35, school n=36)

Table 3

Age Characteristics of Mothers and Children

Variables	Range	Mean	Standard Deviation
<hr/>			
Mothers' Age			
Combined	25-47	36.25	5.10
Clinic	25-45	34.56	5.24
School	31-47	38.00	4.37
Children's Age			
Combined	8-12	10.46	1.31
Clinic	8-12	9.91	1.46
School	9-12	11.00	.86
<hr/>			

Note. N=71 (clinic n=35; school n=36)

Measures

This study utilized a number of measures, two of which are available in research journals: (a) Parental Authority Questionnaire, and (b) Parental Control Scale (Appendixes C3 & C4, respectively). One of the measures was available commercially: Child Behavior Checklist; Externalizing Behavior Subscale (Appendix C5). Additionally, the Child Behavior Vignettes (Appendix C2) was revised for the purpose of this study. The Demographic Questionnaire was designed for this study. All of the questionnaires were placed in random order into envelopes. Approximately 30 minutes was required for the participants to complete the questionnaire package. Each measure is listed in Table 4

and described further in this section. Details regarding the questionnaires' content, purpose, scoring, and reliability coefficients are included.

Demographic Information

A demographic questionnaire was developed (Campbell & Rose-Krasnor, 2001) to collect information such as, child's age, gender, and grade level. A checklist to identify child difficulties such as mental delays, autism, and other developmental problems was included. Mother's age, education, and marital status also was asked.

Children's Externalizing Behaviors

The externalizing subscale (Achenbach, 1991) for 4-12 year-old children from the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) was utilized to measure the participants' children's externalizing behaviors, which is a widely-used behavior rating scale. The subscale consists of 33 items rated on a 3-point scale, consisting of "not true", "somewhat or sometimes true", or "very true or often true" responses. Parents are asked to report on their child's behavior during the past 6 months. Some of the items of the externalizing scale include "Cruelty,

bullying, or meanness to others", "Doesn't seem to feel guilty after misbehaving" and "Teases a lot".

There are two scores within the subscale (aggressive behavior and delinquent behavior), which are combined for a single score. To facilitate comparisons, the raw scores were converted to T scores, which were used in the correlational and regression analyses. Cronbach's alpha coefficient for the externalizing scale is .88 (Achenbach, 1991).

Beliefs about Parenting

The Parental Authority Questionnaire- Modified Version (PAQ; Buri, 1989, 1991) consists of 30 items rated on a 5-point Likert scale, ranging from "strongly disagree" (1) "to strongly agree" (5). The PAQ yields three separate parenting scores (10 items/score) for permissiveness, authoritarianism, and authoritativeness. Test-retest reliabilities scores over a two-week time period were $\underline{r}=.81$ for mother's permissiveness, $\underline{r}=.86$ for mother's authoritarianism, and $\underline{r}=.86$ for mother's authoritativeness (Buri, 1989). Cronbach's alpha values were .75 for mothers' permissiveness, .85 for mothers' authoritarianism, and .82 for mothers' authoritativeness. Especially given that there are only 10 items per scale, both the test-retest

coefficients and the Cronbach alpha values are highly respectable. The discriminant validity scores showed that mother's authoritarianism was inversely related to mother's permissiveness ($r = -.38$, $p < .005$) and mother's authoritativeness ($r = -.48$, $p < .005$). Mother's permissiveness was not significantly related to mother's authoritativeness ($r = .07$, $p < .10$) (Buri, 1989, 1991).

Beliefs about Parenting Goals and Attributions

The Child Behavior Vignettes measure (CBV) was developed and utilized by Hastings & Grusec (1998) and Hastings and Coplan (1999) to assess parental beliefs (e.g., goals, attributions, and emotional responses) across five hypothetical situational contexts. One of the vignettes describes a preschool child in an aggressive scenario, two of the vignettes describe a child in noncompliant scenarios, and two vignettes describe a child in a prosocial scenario.

Parent goals.

After every vignette, mothers rate how important each of the five possible parenting goals would be for them in that particular situation (from 1-"not at all important" to 5="very important"). The goals include two parent-centered goals (e.g., "wanting the child to behave properly,

immediately") and three relationship-centered goals (e.g., "wanting the child and parent to both feel good about the situation"). The aggressive and noncompliant scenarios are collapsed to create a misbehaviors variable.

Parent attributions.

Following each vignette, parents' attributions to the scenarios are assessed on a 5-point scale. Parents evaluate the child's aggression and defiance on four dimensions: stable ("a stage that will pass"), intentional ("did this on purpose"), dispositional ("due to my child's personality"), and typical ("just like how my child behaves"). For each scenario, high scores represent external attributions (stage, unintentional, atypical, and due to situational factors) and low scores represent internal attributions (stable, intentional, typical, and due to dispositional factors).

Modifications.

Due to concerns regarding the lengthy amount of time required by participants to complete the CBV, the number of vignettes was reduced to four instead of five. The Child Behavior Vignettes-Revised (CBV-R) included two non-compliant scenarios, one oppositional scenario, and one aggressive scenario. Given that in this study I was primarily interested in externalizing behaviors, the

prosocial scenario was replaced with a scenario depicting aggression. The replacement scenario described a child asking the parent for permission to go to a friend's house. The parent then asked if all his/her homework had been completed and the child replied that it was. The parent then discovered that the homework had not been completed.

Furthermore, the original CBV included pre-school-aged children in the vignettes. For the purpose of this study, the vignettes were modified in order to ensure that they were developmentally appropriate for children between the ages of 8-11 years and would focus on mothers. For example, the original aggressive vignette described a situation in which the parent picks up his or her child from day-care and observes an argument between her child and another over a toy.

The modification was to change the setting to a school playground and depicts the child grabbing "something" rather than a toy. In one of the noncompliant scenarios, a parent takes his or her child grocery shopping and the child then becomes very agitated because the parent will not buy specific items requested (sugary cereal and a stuffed animal). The child's request for a stuffed animal was changed to magazine or comic book. In the other noncompliant scenario, the parent requests that his or her

child pick up toys, since company is to visit. The vignette was modified so that the parent asked the child to pick up and tidy video games rather than toys.

Additional questions were designed and then integrated into this measure to provide an additional measure of parenting. At the end of each vignette, there were six additional statements, which described possible choices of what the participant might do if she were in that situation. Another 5 questions were included, which asked the participant to rate how strongly she would feel the listed emotions (angry, happy, responsible, embarrassed, worried) in that situation. ¹

Scoring.

For scoring purposes, the parent-centered responses in each vignette (#1 and #4) were added together and divided by the total number of responses to obtain an "average parent-centered" score for each participant. These new parent-centered scores were used in the regression analyses. Relationship-centered responses in each vignette (#2, #3, & #5) also were added together and divided by the total number of responses to obtain an "average relationship-centered" score for each participant. The "average parent-centered" scores and "average relationship-centered scores" were utilized when testing the hypotheses.

In addition, I was interested in the degree to which parents believe in a balanced use of both parent-centered and relationship-centered goals. The absolute value of the difference between the two variables was used to measure balance. The total parent-centered scores were subtracted from the total relationship-centered scores. This difference formed the "goals balance" variable, which was tested within the correlation and regression analyses. Scores closer to zero indicated a balanced belief in the importance of both parent-centered goals and relationship-centered goals. While conversely, as balance scores increase, a stronger tendency for parents to believe in one of the parenting goals more than the other is represented.

The scoring of the attribution scale was consistent with previous research (Lagace-Sequin, 2001), in which low scores represent hostile attributions. High scores represent mothers' tendency to attribute the behavior to the situation or as a phase.

Reliability analyses.

Reliability analyses were conducted for the Child Behavior Vignettes-Revised (CBV-R) for the data in this study. Cronbach's alpha for the parent-centered goals across the vignettes was .91 and for the relationship-

centered goals was .88. Cronbach's alpha for parental attributions scale across the vignettes was .92.

Parental Perceived Control

The subscale "parental control of child's behavior" (PCCB) of the Parental Locus of Control Questionnaire (PLOC; Campis et al., 1986) was used to measure parental perceived control. The subscale is a 10-item list of statements, in which the participants respond on a 5-point scale (low-high agreement with each statement). Examples include "My child's behavior is sometimes more than I can handle" and "I allow my child to get away with things". The individual responses are averaged across the items to achieve a single scale score. Higher scores are associated with higher perceived parental control. The PCCB yielded a Cronbach's alpha reliability co-efficient of .71 (Campis et al., 1986).

Table 4

Summary of Measures

Measure	Acronym	Dimension Measured
Child Behavior Checklist	CBCL	Children's Externalizing Behaviors
Parental Authority Questionnaire	PAQ-P	Maternal Belief in permissive parenting
Parenting Authority Questionnaire	PAQ-AR	Maternal Belief in authoritarian parenting
Parenting Authority Questionnaire	PAQ-AT	Maternal Beliefs in authoritative parenting
Parental Control Scale	PCS	Mothers' locus of control when parenting
Child Behavior Vignettes	PC	Mothers' endorsement of parent-centered goals
Child Behavior Vignettes	RC	Mothers' endorsement of relationship-cent. Goals
Child Behavior Vignettes	BAL	Mothers' endorsement of a balance between PC And RC goals
Child Behavior Vignettes	Att	Mothers' tendencies to make hostile attributions about their children's behaviors.

Results

Descriptive Statistics

Descriptive statistics for all measures are reported in Table 5. Since the clinic and school groups were analyzed separately and combined, both within group and between group statistics are presented. Generally, the means and standard deviations of the measures showed that there were not any significant outliers in the data (plus or minus 2 standard deviations). One of the participants had not completed the CBV-R, therefore, there were only 70 cases for the parent-centered goal scale, relationship-centered goal, attribution, and goals balance scores.

Tests of central variability for all of the measures were conducted to ensure that the data was normally distributed. Both the coefficients of skewness and Kurtosis were within an acceptable range (<2) for all of the measures, therefore, linear transformation was not necessary (Pedhazur, 1997). A ceiling effect was observed on the parent-centered goal scores, however.

Table 5

Descriptive Statistics for Groups Combined, Clinic Group
and School Group

Measure	N	Minimum	Maximum	Mean	SD
Child Behavior Checklist **					
Clinic	35	65	88	74.71	6.483
School	36	30	64	47.25	8.719
Total:	71	30	88	60.79	15.80
Permissive Parenting					
Clinic	35	10	38	19.37	7.960
School	36	11	35	22.17	5.141
Total:	71	10	38	20.79	6.780
Authoritarian Parenting*					
Clinic	35	14	50	35.80	9.026
School	36	17	40	29.39	5.934
Total:	71	14	50	32.55	8.223
Authoritative Parenting **					
Clinic	35	20	50	44.34	7.475
School	36	24	50	40.92	5.798
Total:	71	20	50	42.61	6.850
Parental Control Scale **					
Clinic	35	10	36	19.09	8.441
School	36	32	50	42.86	4.277
Total:	71	10	50	31.41	13.677
Causal Attributions **					
Clinic	35	16	80	36.80	15.125
School	35	39	71	54.13	8.464
Total:	70	16	80	45.59	15.042

Note. Table 5 is continued on the following page.

Table 5 continued

Descriptive Statistics for Combined Groups, Clinic Group,
and School Group

Measure	N	Minimum	Maximum	Mean	SD
<hr/>					
Parent-Centered Goals **					
Clinic	35	3.75	5.00	4.88	.325
School	35	2.25	5.00	3.88	.671
Total	70	3.38	5.00	4.61	.469
Relationship-Centered Goals					
Clinic	35	2.33	5.00	4.01	.892
School	35	2.25	5.00	3.88	.671
Total	70	2.25	5.00	3.95	.786
Goals Balance					
Clinic	35	0	25.0	11.63	8.070
School	35	0	23.0	12.49	5.883
Total	70	0	25.0	12.06	7.024

Note. n varies 70 to 71 or 35-36, depending on the data available.

Significant differences between clinic and school group.

* p<.05. ** p<.001.

*Relationships between the Clinic, School, and Combined
Groups and Measures*

Comparisons of Clinic and School Groups

Given that the clinic group was comprised of mothers of children with identified externalizing behavior problems, it was not surprising that the clinic group had significantly higher externalizing behavior scores than the school group (see Table 5). Further, independent t-tests revealed significant differences between the means of the clinic group and the school group across all of the measures, except for the permissive parenting Scale, relationship-centered, and balance scores.

Independent t-tests revealed significant differences between the clinic and school groups for externalizing behavior ($t=15.03$, $p=.00$), authoritarian and authoritative parenting ($t=3.53$, $p=.001$ and $t=2.16$, $p=.034$ respectively), attributions ($t=-6.00$, $p=.00$), Parental Control Scale ($t=-14.91$, $p=.00$) and parent-centered goals ($t=5.71$, $p=.00$). Generally, the clinic group mothers scored higher on all of these measures, with the exception of the Parental Control Scale and attribution scores. The mothers from the clinic group tended to report lower Parental Control and make more

hostile attributions about their children's misbehaviors than the mothers from the school group.

Correlation analyses showing the relationships between the Child Behavior Checklist scores and the measures of parental beliefs were conducted separately for the clinic and school groups (see Table 6), as well as for the combined group. Significant correlations were observed between most of the study measures.

Despite the significant differences in the means of the groups across most of the measures, many of the correlations in the clinic and school groups demonstrated similar patterns. Given these similar correlations, the groups also were combined for the purpose of analyses. Following separate group analyses, the same tests were conducted for the combined group, with group membership as an additional control variable. The combined groups data provided a wider range of children's externalizing behaviors and a wider range of mothers' beliefs than the separate group data.

Table 6

Pearson's Correlations Coefficients Between the Measures

Measure	CBCL	PAQ-P	PAQ-AR	PAQ-AT	PCS	ATT	PC	RC	BAL
CBCL:Combined	1.00	-.25*	.47**	.26*	-.88**	-.65**	.56**	.05	-.05
Clinic		-.06	.31	-.04	-.55**	-.45**	.46**	.02	.05
School		-.25	.27	.22	-.49**	-.32	-.04	-.13	-.01
PAQ-P:Combined		1.00	-.16	-.37**	.15	.19	-.17	-.03	.12
Clinic			-.04	-.23	-.13	.01	-.14	-.20	.03
School			-.19	-.54**	.14	.30	-.01	.38*	.42*
PAQ-AR:Combined			1.00	-.07	-.41**	-.47**	.42**	.04	-.09
Clinic				-.23	-.15	-.46**	.30	.08	.02
School				-.11	-.16	.04	.27	-.12	-.26
PAQ-AT:Combined				1.00	-.23	-.14	.38**	-.26*	-.35**
Clinic					.01	.23	.28	-.36*	-.36*
School					-.10	-.47**	.21	-.17	-.31
PCS:Combined					1.00	.59**	-.56**	-.01	.10
Clinic						.17	-.25	.10	.08
School						.37*	-.08	.22	.14

Table 6 continued on next page

Table 6 continued

Pearson's Correlations Coefficients and Significance Between the Measures

Measure	CBCL	PAQ-P	PAQ-AR	PAQ-AT	PCS	ATT	PC	RC	BAL
ATT:Combined						1.00	-.33**	-.01	.08
Clinic							-.17	-.16	-.04
School								.25	.47**
PC:Combined							1.00	.22	-.14
Clinic								.02	-.18
School								.4*	-.08
RC:Combined								1.00	.82**
Clinic									.84**
School									.82**
BAL									1.00

Note. N varies from 70 to 71, depending on the available data.

*p<.05. **p<.01

Note: Abbreviations:

CBCL=Child Behavior Checklist PCS=Parental Control Scale

PAQ-P= Permissive Parenting ATT= Mothers' Attributions

PAQ-AR= Authoritarian Parenting PC= Parent-Centered Goals

PAQ-AT= Authoritative Parenting BAL=Goals Balance

RC= Averaged Relationship-Centered Goals

*Relationship Between Externalizing Behavior, Parental
Beliefs and Demographic Variables*

The relationships between the demographic variables (Child gender, child age, maternal education, maternal marital status, and maternal age) and the criterion variable (Child Behavior Checklist scores) and the measures of parental beliefs were tested. The demographic variables that were significantly related to the criterion variable were included as control variables in the regression analyses.

Child Gender

Independent t-tests were conducted to identify the relationship between children's gender and the study variables. As shown in Table 7, there were no significant gender differences for any of the measures. Accordingly, children's gender was not entered as a control variable in the correlation and regression analyses.

Table 7

Relationship between Children's Gender and Study Measures

Measure	Mean	SD	t	df	Sig. (2-tailed)
CBCL			.26	69	.798
Male	61.29	17.12			
Female	60.32	14.71			
PAQ-P			-1.37	69	.176
Male	19.65	6.73			
Female	21.84	6.75			
PAQ-AR			.70	69	.486
Male	33.26	7.67			
Female	31.89	8.75			
PAQ-AT			.43	69	.67
Male	42.97	6.74			
Female	42.27	7.02			
PCS			-.57	69	.573
Male	30.18	14.47			
Female	32.03	13.05			
ATT			-1.71	69	.092
Male	42.47	14.59			
Female	48.44	14.87			
PC			.68	68	.496
Male	4.65	.48			
Female	4.57	.46			

Table 7 continued on next page

Table 7

Relationship between Children's Gender and Study Measures

Measure	Mean	SD	t	df	Sig. (2-tailed)
RC			.04	68	.972
Male	3.95	.79			
Female	3.94	.79			
BAL			-.608	68	.545
Male	11.53	7.18			
Female	12.56	6.94			

Note. *n* varies from 70 to 71, depending on available data.

Note: Abbreviations:

CBCL=Child Behavior Checklist PCS=Parental Control Scale
 PAQ-P= Permissive Parenting ATT= Mothers' Attributions
 PAQ-AR= Authoritarian Parenting PC= Parent-Centered Goals
 PAQ-AT= Authoritative Parenting BAL=Goals Balance
 RC= Averaged Relationship-Centered Goals

Child Age

A significant negative correlation was observed between the Child Behavior Checklist scores and the age of the participants' children (see Table 8). Furthermore, significant correlations were observed between child age and all of the measures of parental beliefs, with the exception of scores for Relationship-Centered goals and the goals balance measure. Child age was significantly negatively related to externalizing behavior, authoritarian

and authoritative parenting, and parent-centered goals scores. Conversely, child age was significantly positively related to permissive parenting, parental control scale, and attributions scores. Therefore, child age was entered as a control variable in the correlational and regression analyses.

Table 8

Correlations Between the Age Variables (Mother and Child) and the Measures.

Measures	Age of Child	Age of Mother
CBCL	-.41**	-.30*
PAQ-P	.24*	.05
PAQ-AR	-.29*	-.27*
PAQ-AT	-.29*	.02
PCS	.35**	.31**
ATT	.35**	.18
PC	-.30*	-.20
RC	-.12	.05
BAL	-.14	-.02

Note. n varies from 70 to 71, depending on the available data. * $p < .05$ (2-tailed). ** $p < .01$ (2-tailed).

CBCL=Child Behavior Checklist PCS=Parental Control Scale
 PAQ-P= Permissive Parenting ATT= Mothers' Attributions
 PAQ-AR= Authoritarian Parenting PC= Parent-Centered Goals
 PAQ-AT= Authoritative Parenting BAL=Goals Balance
 RC= Averaged Relationship-Centered Goals

Maternal Age

A significant negative correlation was observed between the Child Behavior Checklist scores and maternal age (see Table 8). There also was a significant negative correlation between maternal age and Authoritarian Parenting scores and a positive correlation with Parental Control Scale scores. Therefore, maternal age was entered as a control variable for the correlational and regression analyses.

Maternal Education

Participants reported their highest level of completed education on the Demographic Questionnaire (Appendix C1). The categories included elementary school, high school, college or an equivalent diploma, and university. A one-way analysis of variance was conducted to identify the relationship between maternal education and the study variables. Maternal education was not related to the Child Behavior Checklist and parental belief measures. Therefore, maternal education was not entered as a control variable in the correlational and regression analyses.

Maternal Marital Status

Sixty-one of the 71 participants lived in homes with two parents, while only 10 lived in homes as single parents. Since a large majority of the participants were

married or living common-law (86%), the marital status variable was not entered as a control variable in the correlational and regression analyses.

*The Relationship Between Parenting Style and Children's
Externalizing Behaviors*

Authoritarian Parenting

Hypothesis 1a stated that mothers' endorsement of authoritarian parenting style would be positively related to the frequency of their children's externalizing behaviors. In order to examine the hypothesis, partial correlation analyses were first conducted for each group separately, with maternal and child age as control variables. As shown in Table 9, the partial correlation analysis was next repeated with the groups combined, using group membership, maternal and child age as control variables.

The participants in the clinic and combined groups showed a significant positive relationship between mothers' endorsement of authoritarian parenting and children's externalizing behaviors (Table 9). While mothers in the school group had a similar positive trend, the correlation coefficient was not significant ($p=.10$). Thus, this hypothesis was supported only for the clinic and combined groups.

Table 9

Pearson's Partial Correlation Coefficients of the Relationship Between Mothers' Endorsement of Parenting Style and the frequency of their Children's Externalizing Behaviors.

Variables	PAQ-AR	PAQ-P	PAQ-AT
CBCL:			
Clinic	.34*	-.02	-.09
School	.29	-.26	.21
Combined Sample	.27*	-.12	.07

Note. maternal and child age are control variables in each group. Group membership is an additional control variable in combined sample.

* $P < .05$

Note: Abbreviations:

CBCL=Child Behavior Checklist PAQ-P= Permissive Parenting

PAQ-AR= Authoritarian Parenting

PAQ-AT= Authoritative Parenting

Permissive Parenting

In hypothesis 1b, it was expected that mothers' endorsement of permissive parenting would be positively related to the frequency of their children's externalizing behaviors. Similar to the testing of hypothesis 1a, partial correlations were first conducted for each group separately, with maternal and child age as control variables (see Table 9). Next, the groups were combined and the analyses were repeated, with group membership, maternal and child age as control variables.

The partial correlations did not indicate a significant relationship between mothers' endorsement of permissive parenting and children's externalizing behavior scores for each group separately and combined. Hypothesis 1b was not supported.

Authoritative Parenting

Hypothesis 1c stated that mothers' endorsement of authoritative parenting would be negatively related to their children's externalizing behavior scores. Partial correlation analyses were conducted for each group separately, while controlling for maternal and child age. The groups were then combined for partial correlation analyses, with group membership, maternal and child age as control variables.

As shown in Table 9, there was not a significant relationship between mothers' endorsement of authoritative parenting and children's externalizing behaviors in the clinic group, school group, and combined groups.

Parenting Goals and Children's Externalizing Behaviors *Parent-Centered Goals*

In hypothesis 2a, a U-shaped curvilinear relationship between mothers' endorsement of parent-centered goals and their children's externalizing behavior scores was expected. In order to test this hypothesis, hierarchical

multiple regression analyses were conducted for each group separately, using child age and maternal age as the control variables. Following the entry of the control variables on the first step of the analyses, the parent-centered scores were entered. In order to test the predicted curvilinear relationship, mothers' parent-centered scores were squared on the final step. The same procedure was repeated with the groups' data combined, with child age, maternal age, and group membership entered on the first step as the control variables. In this analysis, group membership was significant.

As indicated in Table 10, a significant linear relationship between mothers' endorsement of parent-centered goals was only observed in the clinic group. As Figure 1 demonstrates, the parent-centered goal scores increased dramatically when they reached the ceiling (5). Interestingly, 45.6% of the mothers' parent-centered responses were at the ceiling. The unusual distribution of data makes this finding difficult to interpret.

Table 10

Hierarchical Multiple Regression: Parent-Centered Goals

Criterion: Child Behavior Checklist Scores

Variables	<u>Beta</u>	<u>R2</u>	<u>R2</u> Change	<u>F</u> Change	<u>df</u>
<u>In Order of Entry</u>					
Clinic Group:					
Control					
Child Age	-.162				
Mom Age	.141	.035	.035	.574	2,32
PC	.441*	.223	.188	7.491*	1,31
PC ²	5.854	.248	.025	1.015	1,30
School Group:					
Control					
Child Age	-.064				
Mom Age	.010	.004	.004	.004	2,32
PC	-.044	.006	.002	.059	1,31
PC ²	-1.680	.014	.008	.253	1,30
Combined Groups:					
Control					
Group	-.867**				
Child Age	-.055				
Mom Age	.035	.774	.774	75.317**	3,66
PC	.078	.778	.004	1.209	1,65
PC ²	.871	.779	.001	.385	1,64

Note. N = 70 (clinic n=35; school n=35). Maternal and child age are control variables in each group analysis. Group membership is also controlled for in combined sample. PC= Parent Centered Scores

* p=.01, ** p<.01

Further, the regression analyses revealed significant group effects for the combined analyses. There was not a significant curvilinear relationship between parent-centered goals scores and children's externalizing behaviors for the groups separated or combined. Therefore, hypothesis 2a was not supported.

Relationship-Centered Goals

Hypothesis 2b stated that a curvilinear U-shaped relationship was expected between mothers' endorsement of relationship-centered goals and their children's externalizing behavior scores. Once again, the hierarchical multiple regression analyses were conducted for each group separately with child age and maternal age as the control variables. Following the entry of the control variables, the mothers' relationship-centered goals scores were entered on the second step. To test the predicted curvilinear relationship, mothers' relationship-centered goals scores were squared on the final step of the analyses. The same procedures were conducted with the groups' data combined, using child age, mother age, and group membership as the control variables.

As indicated in Table 11, there were no significant linear relationships observed between mothers' relationship-centered goals and children's externalizing

behaviors for clinic, school, and combined groups. A significant group effect was found in the combined analyses. The hierarchical multiple regression analysis, however, revealed a significant curvilinear relationship between mothers' endorsement of relationship-centered goals and children's externalizing behaviors for the clinic and combined groups.

As demonstrated in Figure 2, the curvilinear relationship moved in the expected direction (U). Both low and high scores on mothers' relationship-centered goals scores were associated with higher children's externalizing behavior scores. Thus, hypothesis 2b was supported for the clinic and combined groups, but not the school group.

Table 11

Hierarchical Multiple Regression: Relationship-Centered Goals

Criterion: Child Behavior Checklist Scores

<u>Variables</u>	<u>Beta</u>	<u>R²</u>	<u>R²</u> <u>Change</u>	<u>F</u> <u>Change</u>	<u>df</u>
<u>In Order of Entry</u>					
<u>Clinic Group:</u>					
Control					
Child Age	-.162				
Mom Age	.141	.035	.035	.574	2,32
RC	-.045	.036	.002	.058	1,31
RC ²	6.136**	.243	.207	8.193*	1,30

Note. Table 11 is continued on the next page.

Table 11 continued

Hierarchical Multiple Regression: Relationship-Centered Goals

Criterion: Child Behavior Checklist Scores

Variables	<u>Beta</u>	<u>R2</u>	<u>R2</u> Change	<u>F</u> Change	<u>df</u>
<u>In Order of Entry</u>					
School Group:					
Control					
Child Age	-.064				
Mom Age	.010	.004	.004	.069	2,32
RC	-.141	.023	.019	.598	1,31
RC ²	1.988	.070	.047	1.518	1,30
Combined Groups					
Control					
Group	-.867**				
Child Age	-.055				
Mom Age	.035	.774	.774	75.317**	3,66
RC	-.035	.775	.001	.339	1,65
RC ²	1.638**	.797	.022	6.985**	1,64

Note. n = 70. Maternal and child age are controlled for in each group analysis. In addition, group membership is controlled for in combined group sample.

RC= Relationship-Centered Scores

** p<.001; * p=or<.01

Goals Balance

It also was expected (Hypothesis 2c) that mothers' endorsement of a balance between relationship-centered goals and parent-centered goals would be negatively

correlated with their children's externalizing behavior scores. To examine the data, partial correlation analyses were conducted between mothers' goal balance scores and children's externalizing behavior scores for each group separately, with child age and maternal age as control variables. Then, the same procedure was repeated for the groups combined, with group membership as an additional control variable.

As shown in Table 12, there was not a significant relationship between mothers' goal balance scores and children's externalizing behavior scores in any of the analyses.

Table 12

Pearson's Partial Correlations between Mothers' Goals
Balance Scores and Children's Externalizing Behavior Scores

Variables	BAL	Significance (2-tailed)
CBCL:		
Clinic	.01	.956
School	-.02	.925
Combined	.003	.982

Note. n=70. Maternal and Child Age controlled for in each analysis. In addition, group membership was controlled for in combined group analysis.

BAL= Goals Balance Scores

*The Relationship between Mothers' Attributions and
Children's Externalizing Behaviors*

In the third hypothesis, we expected that mothers' tendency to make hostile attributions about their children's externalizing behaviors would be positively related to children's externalizing behavior scores. Since lower scores represent stronger hostile tendencies, significant negative correlations between mothers' attribution scores and children's externalizing behavior scores were expected.

To test the hypothesis, partial correlation analyses were conducted between mothers' attribution scores and children's externalizing behavior scores for each group separately, with child and maternal age as control variables. The procedure was repeated for the groups combined, with group membership as an additional control variable.

As expected, the correlation between maternal attribution scores and children's externalizing behavior scores was significant and negative. Therefore, mothers' tendency to make hostile attributions about their children's behaviors was positively related to children's externalizing behavior scores for clinic, school, and

combined groups (see Table 13). Hypothesis three was supported for all three groups.

Table 13

Pearson's Partial Correlations between Mothers' Attribution Scores and Children's Externalizing Behavior Scores

Variable	Att	Significance (2-tailed)
CBCL		
Clinic	-.45**	.009
School	-.34*	.048
Combined	-.35**	.003

Note. n=70. Maternal age and child age were control variables for each group. In addition, group membership was a control variable for combined sample.

Att= Attribution Scores

The Relationship between Mothers' Beliefs in External Locus of Control and Hostile Attributions and Children's Externalizing Behavior Scores

The fourth hypothesis was that mothers' beliefs in external parenting locus of control would be positively related to children's externalizing behavior scores, especially among those mothers who tend to make hostile attributions. In order to test the expected interaction, three-step hierarchical multiple regression analyses were conducted for each group separately, with child and maternal age as control variables on the first step. Mothers' attribution scores and Parental Control Scale scores were entered on the second step of the analyses. In

order to test the interaction, the attribution scores and Parental Control Scale scores next were standardized. The product of the standardized attribution scores and the standardized Parental Control Scale scores were entered on the final step. The same procedures were repeated for the groups combined, with group membership as an additional control variable on the first step.

As identified in Table 14, the second step of the analyses revealed a significant negative linear relationship between mothers' Parental Control Scale scores and children's externalizing behavior scores in clinic, school, and combined groups. A significant group effect was observed in the combined analyses. Further, a significant negative linear relationship was observed between mothers' attribution scores and children's externalizing behavior scores only in the clinic and combined groups. Significant group effect was found in the combined group regression analyses.

The final step of the regression analyses did not reveal a significant interaction between mothers' beliefs in external parenting locus of control and hostile attributions in predicting children's externalizing behavior scores in clinic, school, or combined groups. Hypothesis four was not supported.

Table 14
Hierarchical Multiple Regression: The Relationship between
Mothers' Beliefs in External Parenting Locus of Control,
Mothers' Attribution Scores, and Children's Externalizing
Behavior Scores

Criterion: Child Behavior Checklist Scores

Variables	<u>B</u>	<u>R2</u>	<u>R2</u> Change	<u>F</u> Change	<u>df</u>
Clinic:					
First Step					
Child Age	-.162				
Mom Age	.141	.035	.035	.574	2,32
Second Step					
ATT	-.344**				
PCS	-.545**	.503	.468	14.14**	2,30
Third Step					
ATT X PCS	.005	.504	.001	.04	1,29
School					
First Step					
Child Age	-.062				
Mom Age	-.058	.007	.007	.117	2,33
Second Step					
ATT	-.214				
PCS	-.489**	.314	.307	6.94**	2,31
Third Step					
ATT X PCS	.486	.343	.029	1.31	1,30
Combined					
First Step					
Group	-.860**				
Child Age	-.050				
Mom Age	.016	.768	.768	73.95**	3,67
Second Step					
ATT	-.415**				
PCS	-.155*	.835	.067	13.15**	2,65
Third Step					
ATT X PCS	-.021	.835	.000	.122	1,64

Note. N = 70 (clinic n=35. school n=35). Maternal and child age are control variables in each group. Group membership is an additional variable in combined sample. Att= Attribution scores. PCS= Parental Control Scale scores
 ** p<.01, *p<.05

Overall Model

To describe an overall model, it was hypothesized that mothers' beliefs (parent-centered goals, relationship-centered goals, goals balance, attribution, and parental control scores) would add unique variance to the predictions of children's externalizing scores, over and above mothers' endorsement of parenting (authoritarian, authoritative, and permissive). The hypothesis was tested using a three-step hierarchical multiple regression, with children's externalizing behavior scores as the criterion variable.

Given the small sample clinic and school groups sizes, separate group analyses were not conducted. The analyses were conducted with the combined groups, with group membership and child and maternal age as the control variables in the first step. Mothers' parenting style scores (authoritarian, permissive, and authoritative) were entered on the second step of the analyses. Mothers' relationship-centered, parent-centered, balance, attribution and Parental Control Scale scores were entered on the third step.

The order of entry for the overall analyses was decided by theoretical interest about whether mothers'

information processing about parent-child interactions (e.g., attributions, locus of control, and goals) would explain variance of children's externalizing behavior scores, beyond that explained by mothers' beliefs about what they would do or how they would react behaviorally in specific situations (e.g., parenting style). Therefore, mothers' parenting style scores (permissive, authoritarian, authoritative) were entered on a single step after the control variables and before mothers' attribution, goals, and perceived control scores, which were entered together on the last step of the analyses.

As indicated in Table 15, the overall model hypothesis was not fully supported, although several significant findings were revealed. A significant group effect was found in the combined analyses. Mothers' endorsement of permissive and authoritative parenting, as shown in the second step, did not significantly contribute unique variance in predicting children's externalizing behavior scores in the combined groups. However, a significant positive linear relationship was observed between mothers' endorsement of authoritarian parenting and children's externalizing behavior scores.

Table 15

Hierarchical Multiple Regression Testing the Overall Model

Criterion: Child Behavior Checklist scores

Variables	Beta	R2	R2 Change	F Change	df
Combined Groups:					
Step 1:					
Group	-.867**				
Child Age	-.055				
Mom Age	.035	.774	.774	75.317**	3,66
Step 2:					
PAQ-P	-.028				
PAQ-AR	.155*				
PAQ-AT	.059	.796	.022	2.224	3,63
Step 3:					
PC	.111				
RC	-.229				
BAL	.267*				
ATT	-.158*				
PCS	-.344**	.863	.068	5.752**	5,58

Note. $N=71$ (clinic $n=35$; school $n=36$), except PC, RC, BAL, ATT ($N=70$, clinic $n=35$; school $n=35$). Maternal and child age are control variables for in each analysis. Group membership also controlled for in combined sample.

Note. Table 15 continues on the next page.

* $p < .05$ ** $p < .01$

Note. Abbreviations

CBCL=Child Behavior Checklist PCS=Parental Control Scale
 PAQ-P= Permissive Parenting ATT= Mothers' Attributions
 PAQ-AR= Authoritarian Parenting PC= Parent-Centered Goals
 PAQ-AT= Authoritative Parenting BAL=Goals Balance
 RC= Averaged Relationship-Centered Goals

As shown in the third step, mothers' averaged parent-centered scores and relationship-centered scores were not significantly related to children's externalizing behavior scores. A significant positive relationship was, however, found between the goal balance scores and children's externalizing behavior scores indicating greater goal imbalance associated with higher externalizing scores. The overall analyses also revealed a significant negative relationship between mothers' attribution scores and children's externalizing behavior scores in the combined groups. Finally, a significant negative relationship was observed between mothers' Parental Control Scale scores and children's externalizing behavior scores.

Discussion

Developmental pathways to children's externalizing behavior problems reflect complex processes and dynamic interplays between qualities that children bring to their social interactions and the characteristics of their immediate caregiving environment and its social-ecological context (Grusec, Goodnow, & Kucyznski, 2000; Mills, 1999). For example, previous studies have supported the role of child temperamental factors in developing behavior problems

(Bates, Pettit, Dodge, & Ridge, 1998; Lytton, 1990). Early child difficultness and resistance to control significantly predicted externalizing behaviors in the preschool years (Bates & Bayles, 1988) and again at age 8 (Bates, Bayles, Bennet, Ridge, & Brown, 1991).

Further, children raised in economically disadvantaged families are at greater risk for childhood behavior problems than children raised in economically advantaged families (Ackerman, Kogos, Youngstrom, Schoff, & Izard, 1999). Emerging empirical evidence also suggests that parental beliefs, ideas and perceptions about child social development are intimately related to the manner in which parents interact with their children, which, in turn, may affect the child's social development (Hastings & Grusec, 1998; Rubin & Mills, 1992).

In this study, I examined the relationship between maternal beliefs (parenting, goals, attributions, and locus of control) and the frequency of their children's externalizing behaviors. Three questionnaires were completed by participating mothers to assess maternal beliefs. Children's externalizing behaviors, as reported by their mothers, included aggressive and delinquent behaviors.

The sample consisted of two groups of mothers with children between the ages of 8 and 12 years. The first group consisted of 36 mothers of children referred to a Children's Mental Health Clinic due to emotional/behavioral problems. The second group consisted of 35 mothers of children attending public school in the Niagara District Board of Education. Correlation and multiple regression analyses were conducted for each group separately and then combined in order to test the hypotheses. In the following paragraphs, I will discuss the results and implications of the tested hypotheses, as well as some of the methodological problems and limitations of this study.

Beliefs about Parenting

The link between high power, assertive parenting techniques (authoritarian) and children's externalizing behavior problems has been demonstrated in previous research (Dodge, Bates, & Pettit, 1992; Rubin & Mills, 1992). The expectation that there would be a positive correlation between mothers' endorsement of authoritarian parenting and the frequency of children's externalizing behavior scores was supported for the clinic group and the combined groups, as shown in both the partial correlation analyses and the regression analyses of the overall model.

The significant findings elicit concerns for the future of children with mothers' who endorse authoritarian parenting. A critical developmental task during adolescence is for teens to individuate from their families in order to acquire a degree of autonomy and independence (Barber, Olsen & Shagle, 1994). Optimal individuation is promoted by parents who allow adolescents sufficient autonomy to explore social identities and roles within the context of a supportive and connected relationship (Peterson, Bush & Supple, 1999). Given the adolescent need for increased freedom and autonomy, parents' endorsement of authoritarian parenting during adolescence is related to externalizing behavior difficulties, family conflict, and substance abuse (Aquilino & Supple, 2001). Harsh and restrictive parenting (authoritarian) predicted adolescents' feelings of anger and resentment and is linked to oppositional and defiant behavior.

It has been consistently reported in previous research (Pettit & Bates, 1989; Rubin, Mills & Rose-Krasnor, 1989) that the endorsement of permissive parenting is significantly and positively correlated with children's externalizing behavior problems. However, this finding was not observed in this study for any of the groups. Since previous research also had linked the endorsement of

authoritative parenting style to social competence, it was further surprising that a significant relationship was not found in this study between mothers' endorsement of authoritative parenting and their children's externalizing behavior scores for any of the groups.

Both of these findings were puzzling and difficult to interpret. A possible explanation may be that permissive and authoritative parenting styles become less predictive of children's externalizing behaviors in middle childhood than in pre-school years. Parenting styles are presumed to be relatively stable in early childhood (Roberts, Block & Block, 1984) and over longer periods of time (McNally, Eisenberg & Harris, 1991). Therefore, it is not likely that mothers of children in middle childhood have changed their beliefs in parenting from when their children were younger. Perhaps, other influences on children's misbehaviors not measured in this study become more important during middle childhood. For example, the beliefs of figures of authority other than mothers may become important as children become older. The beliefs and behaviors of school teachers, principals, and sports coaches are a few examples of possible influences which may predict children's externalizing behaviors. The beliefs of these adults and their potential relationship with

children's externalizing behaviors have not been assessed in this study. However, these findings should be interpreted with caution until replicated.

Parenting Goals

Parent-Centered Goals

It has been suggested that the outcomes parents hope to achieve while interacting with their children (goals) may be powerful contributors to understanding individual differences in parenting (Hastings & Grusec, 1998; Dix, 1992). When parents were primarily concerned with parent-centered goals, they exhibited behaviors focused on their own needs, such as obtaining compliance from their children using power assertive techniques (Hastings & Grusec, 1998; Kuczynski, 1984). Hastings and Coplan (1999) suggested that when mothers' parent-centered goals were appropriate for the misbehavior, their children were less likely to engage in externalizing behaviors than when mothers' goals were inappropriate for the misbehaviors (e.g., over reaction to a minor misbehavior). Therefore, a moderate endorsement of parent-centered goals was associated with social competence, which was why a u-shaped curvilinear relationship was expected between mothers' endorsement of

parent-centered goals and their children's externalizing behavior scores.

However, this hypothesis was not supported for any of the groups. Instead, a significant positive linear relationship between mothers' endorsement of parent-centered goals and children's externalizing behaviors was found for the clinic group only. Generally, mothers' endorsement of parent-centered goals was significantly associated with higher frequencies of children's externalizing behaviors.

The significant positive linear relationship between parent-centered goals and children's externalizing behaviors in the clinic group supports previous research suggestions that mothers' higher parent-centered scores significantly predicted children's externalizing difficulties (Hastings & Coplan, 1999).

Interestingly, the partial correlational analyses for the school and combined groups did not support this finding. A possible explanation is that the effects of parenting beliefs are only true for the sample group of mothers of children with high externalizing behavior scores (clinic group). As described in the Results section, clinic group mothers' parent-centered scores were significantly higher than school group mothers' parent-

centered scores. Also, clinic group mothers' children's externalizing behavior scores were significantly higher than the school group mothers' children's externalizing behavior scores. This finding supports previous suggestions that higher parent-centered scores are associated with higher frequencies of children's misbehaviors (Hastings & Coplan, 1999; Hastings & Grusec, 1998).

Hastings and Grusec (1998) also found that parent-centered goals were associated with power assertive techniques, especially when immediate compliance was desired. Interestingly, as reported in the Results section, clinic group mothers' endorsement of authoritarian parenting style was significantly higher than school group mothers' endorsement of authoritarian parenting. Perhaps, the clinic groups mothers' stronger endorsement of parent-centered goals and authoritarian parenting style than the school group mothers is related to the clinic group mothers' higher children's externalizing behavior scores.

There is actually little direct empirical support, to date, which links parent-centered goals and children's externalizing behaviors (Dix, 1992; Hastings & Grusec, 1998). Hastings and Coplan (1999) found that parent-centered goals were not predictive of preschool children's

externalizing behaviors. Yet, these studies did not include clinic group samples.

Furthermore, 45.6% of the mothers' parent-centered responses were at the ceiling of the scale ("extremely important"). It is possible that the parent-centered questions may be particularly sensitive to social desirability response bias (e.g., "I would want my child to behave properly, right away" and "I would want my child to understand that I expect him/her to behave properly").

Hastings and Grusec (1998) found that children's public misbehaviors heightened parents' endorsement of obtaining immediate compliance and obedience (parent-centered goals). Perhaps, knowing that their responses were being interpreted, mothers felt the need to report they valued immediate compliance and obedience. On the other hand, previous studies have not reported social desirability bias difficulties (Hastings & Grusec, 1998; Kuczynski, 1984), though the researchers recognized the importance of interpreting self-report data cautiously. Similar methodological difficulties make it difficult to interpret the current study's findings.

Relationship-Centered Goals

A parent who maintains relationship-centered goals is primarily concerned with maintaining a loving and close

relationship. Relationship-centered parents tend to solve problems with their children in a fair and balanced way and attempt to reach mutually acceptable outcomes (Hastings & Grusec, 1998). Hastings and Coplan (1999) found that mothers who tended to be exclusively relationship-centered tended to have children with higher externalizing behavior problems in preschool than parents who endorsed both relationship-centered goals and parent-centered goals.

As expected, a significant U-shaped curvilinear relationship was revealed between mothers' endorsement of relationship-centered goals and children's externalizing behavior problems for the clinic and combined groups. The school group's small sample size and lower frequency of mothers of children with externalizing behavior problems than the clinic group may have not provided adequate statistical power. In addition, different processes and variables of influence may be operating between the two groups.

The observed findings are consistent with the literature which suggested that when mothers' relationship-centered goals were suitable for the misbehavior then their children were less likely to have externalizing behavior problems (Hastings & Coplan, 1999). Furthermore, I found that mothers' endorsement of relationship-centered goals

predicted children's externalizing behavior problems for children in middle childhood.

Hastings and Coplan (1999) also reported that mothers who endorsed both parent-centered goals and relationship-centered goals tended to have more socially competent children than children of mothers who strongly endorsed one parenting goal over another. Mothers who had a balanced focus and displayed the ability to be appropriately flexible and adaptive fostered their children's social competence. Conversely, mothers who had not acquired a balanced focus were more likely to utilize the "right" goals at the "wrong" times or vice versa. For example, when a child is about to strike another child with a rock, it is particularly suitable for the parent to endorse a parent-centered goal (immediate obedience). A parent who chooses to focus instead primarily on maintaining a loving and close relationship with the child may be utilizing the "right" goal at the "wrong" time.

As an attempt to measure mothers' tendencies to endorse a balanced use of both parent-centered goals and relationship-centered goals, the absolute difference between the two scores was calculated. To date, research has not measured balance goal scores as a separate construct. Instead, the goals were measured separately.

Interestingly, although the goals balance scores did not significantly correlate with children's externalizing behavior scores in any of the groups, the overall regression model found a significant positive relationship in the combined groups. The overall model revealed a significant relationship between balance scores and children's externalizing behavior scores above and beyond mothers' parenting style scores in the combined group. This finding suggests that assessing the degree to which parents balance their parent goals may predict children's externalizing behavior scores once variance attributed to parenting style has been controlled.

Mothers' Attributions

It has been demonstrated that mothers who had hostile attributions (negative dispositional and/or negative intentionality) about their children's misbehaviors were more likely to have children with externalizing behavior problems than mothers with non-hostile attributions (Nix et al., 1999). There also was evidence that mothers interpreted externalizing behaviors as more intentional and dispositional in older than in younger children (Dix et al., 1986, 1989; Mills & Rubin, 1992).

Consistent with these findings, a significant correlation was observed between mothers' tendencies to make hostile attributions and children's externalizing behavior scores for all three groups. Similarly, the overall regression model analyses also revealed a significant relationship between mothers' tendencies to make hostile attributions and children's externalizing behavior scores over and above mothers' parenting scores for the combined groups. This finding raises concerns about the possible long-term effects of maternal hostile attributions for children. Interestingly, Dix (1993) also suggested that children tend to internalize views of self that are consistent with the attributions made by their parents. Children tend to internalize their mothers' hostile attributions about their behaviors, which may contribute to the frequency of externalizing behaviors (Dix, 1993).

The two-way influence process between mothers' hostile attributions and children's behaviors was highlighted (Dix, 1993). Children of mothers with hostile attributions about their misbehaviors may be at risk for continued externalizing behavior problems during adolescence and young adulthood, which also are associated with a plethora

of other difficulties (e.g., peer conflict, substance abuse) (Ladd & Burgess, 1999).

Mothers' Attributions and Locus of Control

It has been consistently reported that mothers with low perceived parenting power tend to be overly reactive and easily interpret interactions with their children with negative evaluation (Bugental 1999a, 1998, 1990). Mothers with a perceived low parenting power tend to make hostile attributions about their children's misbehaviors. Hagekull et al. (2001) reported a negative association between perceived parenting control and children's externalizing behavior problems and social competence.

To test the interaction between maternal attributions and perceived parenting control, the effects of these variables separately were also revealed. A significant negative relationship was observed between mothers' attribution scores and children's externalizing behavior scores (as discussed above), but only for the combined group. However, significant negative relationships were observed between mothers' Parental Control Scale scores and children's externalizing behavior scores for all the groups. The overall model regression analyses, which only included the combined groups, also found a significantly

negative relationship between mothers' Parental Control Scale scores and their children's externalizing behavior scores above and beyond mothers' parent-centered, relationship-centered, goals balance, and attribution scores. Both the interaction regression and overall model regression analyses were the same on the first step. Generally, parents who reported low parental control tended to have children with higher frequencies of misbehaviors.

As Mills (1999) and Bugental et al. (1996; 1998) reported, mothers with a low sense of control tend to readily interpret situations that involve conflict as threatening. As an attempt to restore control, these mothers are prone to react inappropriately to the situation. Mills (1999) and Bugental et al. (1989; 1996; 1998) demonstrated that when low-control parents have an opportunity to exercise control, a pattern of overcontrol might occur. Concerns for children are indicated, since parental overcontrol is associated with behavioral difficulties for children during their teen years (Aquilino & Supple, 2001).

Although there was a positive relationship found between mothers' low perceived parenting control and their children's externalizing behaviors, the hypothesis that mothers' beliefs in external parenting locus of control

would be negatively related to children's externalizing behavior scores, especially among mothers who tend to make hostile attributions, was not supported for any of the groups. One explanation is that the interaction between mothers' hostile attributions and Parental Control Scale scores, as they relate to children's externalizing behavior scores, depend on factors not assessed in this study (e.g., child temperament). The relationships between maternal beliefs and children's externalizing behaviors are complex and all of the influencing variables are certainly not tested in this study.

Perhaps, these findings provide further support for Bugental et al.'s (1998) report that mothers with low-power schemas are highly attuned to the opportunities to gain some sense of control, which may present itself through harsh and punitive parenting. Bugental et al. (1990) also found that mothers with low perceived power reported feeling more annoyance and anger and reacted with negative affect towards their children's misbehaviors than those with moderate or high perceived power. The findings of these previous studies and the current study point to mothers' perceived control as an important predictor of children's development of externalizing behavior problems. Future studies should examine the relationship between

perceived parenting control and other variables, such as affect and child characteristics (e.g., temperament).

The Overall Model's Implications

An overall model was tested through hierarchical regression, which included all of the maternal belief scores and utilized the children's externalizing behavior scores as the criterion variable. The model was specifically designed to test whether mothers' beliefs are predictive of children's externalizing behavior scores above and beyond what parents think they would do in parent-child interactions. Therefore, mothers' parenting scores (authoritarian, authoritative, and permissive) were entered before and separate from the information-processing beliefs (goals, attributions, and perceived control). Given that most of the study variables were included in the overall model and that the separate school and clinic sample sizes were small, the groups were combined for the regression analyses.

Most of the specific findings of the overall regression model have been discussed earlier in this section, however, the overall implications are important to address. The maternal Parental Control Scale was a significant predictor of children's externalizing behavior

scores for the combined groups, over and above parenting style scores. Although a causal relationship cannot be inferred from correlational analyses, this again clearly speaks to the importance of parents' perceived control, attributions and goal balance when interacting with their children.

Yet, limited research has been conducted to understand the complex cognitive schemas concerned with the power relationship between mother and child (Mills, 1998). Cognitive schemas represent the way in which parents think about all of the various aspects of their interactions with their children (Bugental, 1992). As discussed throughout the previous section, the results of this study support the need for further investigations regarding mothers' parenting control and its relationship with their children's externalizing behaviors.

The findings also suggest clinical implications. Numerous parenting programs and workshops focus on what parents should "do" and how parents should interact with their children in order to promote their children's social competence. As Rubin and Mills (1992) have reported, beliefs are intimately related to the manner in which the parent interacts and behaves with the child, which, in turn, may affect the child's development.

The overall regression model indicated that mothers' beliefs and interpretations were predictive of children's misbehaviors, beyond the variance explained by parenting style. Therefore, clinical suggestions may include a treatment focus on assessing parental beliefs and how their beliefs vary across time and contexts in child-rearing situations. For example, a parent may not be aware that he or she has hostile attributions beliefs about his or her children's misbehaviors. Also, a parent may not recognize his or her internal belief of low perceived power when parenting.

Counseling clinics or parent group workshops that focus on assessing and, if necessary, shifting cognitive distortions about children, identifying and re-developing parent goals, and helping to increase parents' perceived control are all examples of potentially valuable clinical techniques to help parents more effectively manage their children's externalizing behavior difficulties. Assessment of parental beliefs, education, and counseling may heighten parents' cognitive insights into identifying their own parental beliefs and consider the impact such beliefs may have on their children's social development.

Overall, the results of the overall model revealed interesting findings and implications. However, the

results should be interpreted with caution due to the low participant-predictor variable ratio in the analyses, which weakened the reliability of the regression model.

Child Gender

In the present study, I did not find significant effects for child gender in any of the correlation analyses for the clinic or the school groups. Although a couple of studies have not reported significant relations between child gender and parental beliefs (Hastings & Grusec, 1998; Mills & Rubin, 1990), the majority have. For example, there is evidence that parents are more accepting of their sons' externalizing behaviors and more disapproving of their daughters' (Mills & Rubin, 1990). Also, mothers of boys were found to be more likely to make hostile attributions about their sons' misbehaviors than mothers of girls were (Grusec & Lytton, 1988).

Interestingly, 51.4% of the clinic sample in the current study consisted of mothers of girls with externalizing behavior difficulties. The children's clinic sample provided an opportunity to examine children with severe behavioral difficulties, approximately half of which were female. Perhaps, girls are becoming as likely to engage in aggressive and delinquent behavior as boys in

recent years. Furthermore, maybe girls are as likely to engage in aggressive and delinquent behaviors as boys, especially during middle childhood. A recent report from the Solicitor General Canada (Leschied, Cummings, Van Brunschot, Cunningham, & Saunders, 2000) indicated that since 1995 violent crime among female youths had dramatically increased, whereas the rate for male youths had fallen. Although the male youths continued to commit more crimes than females, the accelerated trend among female youths raises questions as to the meaning.

On the other hand, a tendency for boys to engage in more physical aggression than girls at all ages has been consistently revealed in previous findings (Cairns, Cairns, Neckerman, Ferguson, & Gariepy, 1989; Knight, Fabes, & Higgins, 1996). Research that utilized a broadened definition of aggression and delinquency to include verbal threats and intimidation found girls to be as aggressive as boys but in a different way (Crick & Bigbee, 1998; Crick, Bigbee, & Howes, 1996). Crick & Bigbee (1998) asserted that girls are more likely to engage in relational aggression, which is aggression aimed to harm others through manipulation of peers (e.g., spreading bad rumors about a peer).

The Child Behavior Checklist, utilized in the current study, combined all misbehaviors to provide a single externalizing behavior score. I recommend that future studies separately examine mothers' beliefs about the types of aggressive and delinquent behaviors (physical and verbal) in order to better understand the differences between girls and boys externalizing behaviors. Perhaps, girls are becoming more physically aggressive or, perhaps, boys and girls engage in different forms of aggression as suggested by Crick and Bigbee (1998). Furthermore, another possible explanation is that gender differences may have been revealed in the current study if mothers' beliefs about the types of misbehaviors (physical and verbal) had been measured separately.

Limitations

There are several limitations to this study that should be considered. Given the homogeneous nature of this sample, it is not possible to widely generalize the results of this study. Since the sample consisted of only mothers, the results cannot be generalized beyond mothers and their children. Including fathers' beliefs in future studies would strengthen the ability to generalize results. Secondly, the sample consisted of an unusually low number

of divorced, separated, or single mothers (71% of homes had 2 parents). Few of the mothers had completed university. Thus, the maternal education data did not approximate a normal distribution (Pedhazur, 1997). Furthermore, given the homogenous nature of the sample, differences in maternal beliefs across cultures were not considered. The relationship between maternal beliefs and child externalizing behaviors that were found in the current study may not be found in other cultural groups. It is recommended that future studies utilize a more heterogeneous sample, which could be provided with larger sample sizes.

School and clinic group correlations were initially conducted separately due to the significant differences between the two groups and the study measures. The separate group analyses may not have yielded significant results due to the small sample sizes and lower statistical power. Significant correlations may only be found when a higher frequency of children's externalizing behaviors is included, such as in the clinical and combined groups. The school group primarily consisted of children with lower externalizing behavior scores than the clinic group, which, combined with the small group size, may have reduced the statistical power. Alternatively, perhaps the effects the

relationship between parenting beliefs and children's externalizing behaviors is only true for the high externalizing group (clinic).

It is important to note that the nature of the data collection and design of this study did not allow us to draw conclusions about the direction of effects or the causal nature of the relationship between parental beliefs and children's externalizing behaviors. The current study did not examine the bi-directional nature of the relationship between maternal beliefs and children's externalizing behaviors. While the significant findings revealed relationships between the variables, it is also not known whether maternal beliefs caused children's externalizing behaviors or whether a third variable may explain the observed relations, since the participants may vary in many other ways not measured in this study. For example, personality characteristics of the mothers and their children were not considered.

Developmental pathways to children's misbehaviors are complex and multifactorial. Many processes that reflect the dynamic interplay between mother and child social interactions were not examined within this study. Previous findings have found that child characteristics, such as personality (Mills, 1998), environmental influences

(Deater-Deckard & Plomin, 1999), and family culture (Harwood, Schoelmerick, Schulze, & Gonzalez, 1999) are examples of additional predictors of children's externalizing behavior difficulties.

The unidirectional design of this study is incomplete, since mothers and their children have reciprocal effects on each other's development (Hastings & Coplan, 1999). For example, a parent with a difficult child is more likely to be presented with childrearing challenges more frequently. Children's misbehaviors are often associated with complaints from teachers, social embarrassment, and strain in the marital relationship, which results in greater levels of parenting stress and may lead to negative parental perceptions of their children (Suarez & Baker, 1997).

Given the identified limitations, this study's results should be interpreted with caution. It is recommended that future studies develop a model to examine the bi-directional relationship between maternal beliefs and child characteristics, especially across different child rearing situations and contexts. Future research is needed on these issues to determine the degree to which the present findings generalize to other situations and the degree to which they depend on factors not assessed.

Although typical in this type of research, an additional limitation is that the measures utilized in the current study to assess parental beliefs and children's externalizing behavior were all self-report. Since the participants needed to identify their names and additional demographic information, they may have felt self-conscious and provided socially desirable responses on the questionnaires. Because participants may have felt their answers are not anonymous, participants also may have been less candid. The parent-centered scores, in particular, were mostly at the ceiling, perhaps because of social desirability responses. Social desirability bias in the maternal responses would attenuate the relationship between the measures and child outcomes.

Further, only one score per child was obtained, as reported by mothers, for externalizing behavior problems. These scores are subject to social desirability responses and may also be positively or negatively biased. Previous research has found that teachers' reports provide an additional, reliable, and potentially more objective perspective (Deater-Deckard & Plomin, 1999).

Given some of the methodological concerns regarding the use of self-report measures, perhaps the addition of child and teacher reports along with the maternal reports

would be valuable in future studies. Findings need to be followed up in future longitudinal research using both self-report measures and observations in order to better understand the relationship between parental beliefs and children's externalizing behaviors. Designing an assessment setting to observe the interaction between mother and child also may provide an opportunity to examine the relationship between parental beliefs and parental behaviors in various contexts and situations.

Statistical Considerations

As noted throughout the Results and subsequent Discussion section, there were significant differences between the clinic and school groups. It logically followed that children referred to a Children's Mental Health Clinic for emotional/behavioral problems would score significantly higher on the Children's Behavior Checklist. This provided an advantageous opportunity to examine a sample that contained a wider range of children's externalizing behavior problems than a sample from the general population. On the other hand, it also meant that group differences needed to be controlled for in the correlation and regression analyses.

Separate group analyses were first conducted before combined group analyses due to the reported differences between the groups. Due to the small sample sizes of the individual groups, there was low statistical power in each of the analyses, which made it less likely to find significant results. There also were too many variables tested to provide sufficient statistical power for the separate group analyses.

Larger sample sizes than the ones utilized in this study would provide the needed statistical power to test the relationship between parental beliefs and children's externalizing behavior problems. The low participant-predictor variable ratio in all of the analyses weakened their reliability. It also may be that significant correlations are more likely to be found when a wider range of externalizing behaviors are found, such as in clinical samples. Including mothers of children with identified behavior difficulties may have enhanced the ability to examine the relationship between maternal beliefs and their children's externalizing behavior problems in this study. Results of such future studies would support or deny the possibility that the clinic group analyses resulted in spurious correlations.

Clinic and School Group Differences

It logically followed that the clinic and school group would reveal some differences between each other, since the clinic group mothers reported much higher frequencies of externalizing behavior problems with their children than the school group. However, in general, the clinic group findings unexpectedly revealed that mothers' cognitive beliefs and interpretations of their children's misbehaviors predicted the frequency of their children's externalizing behavior scores more strongly than the mothers in the school group.

A possible explanation is that mothers of children with behavior difficulties become more reflective in their information processing about the misbehaviors than mothers of children with few behavior difficulties, which may make their cognitions more predictive in the analyses. Perhaps, the clinic group mothers have needed to think about their children's misbehaviors more often than school group mothers and have been open minded to different beliefs and ideas as an attempt to decrease their children's misbehaviors. Without the experience of dealing with their children's misbehaviors frequently, the school group mothers may have experienced more ambiguity in identifying their beliefs about the misbehaviors.

Furthermore, while both the school and clinic group samples were small, the clinic group all consisted of children with externalizing behavior difficulties. Although the clinic group held a restricted range of children's externalizing behaviors, the small school sample may not have provided an adequate range of children's externalizing behaviors to accurately represent the general population.

Due to the lower frequencies of mothers with children with externalizing behavior problems in the school group compared to the clinic group, it is more difficult to find the relationship between school group mothers' beliefs and their children's externalizing behaviors. Also, since participants were recruited on a voluntary basis and not through random sampling, the participants may not represent an accurate representation of the school mothers' beliefs. It is important to note that the results of the school group analyses may not generalize to the whole population.

Relations between Parenting Beliefs and Parenting Practices

Parental beliefs are intimately related to the manner in which the parent interacts and behaves with their child (Rubin & Mills, 1992). The study of the impact of parental

beliefs is valuable because the beliefs, through their effects on the behavior of the parents, affect the child.

However, researchers are becoming increasingly interested in moderating variables between parental beliefs and parental behavior. The examination of parental beliefs has demonstrated that parental beliefs vary across time and contexts (Hastings & Grusec, 1998). The question also raised by researchers is whether parents always behave consistently with their beliefs. It has been recommended that future research needs to examine the associations among different parenting beliefs, the emotional climate, and actual parenting practices (Coplan, Hastings, Lagace-Sequin & Moulton in press; Mills, 1999).

There has been a particularly strong recognition by researchers of the importance of parental emotional responses (Coplan, Hastings, Lagace-Sequin, Moulton, in press). Coplan et al. (in press) showed how beliefs and emotional responses varied across different parenting styles and contexts. Their results highlighted that mothers' affective emotional responses also were not uniformly negative or positive.

According to Dix (1993) and Nix et al. (1999), parental negative mood leads to the interpretation of children's misbehaviors as negative and intentional, which

increases the probability that parents will respond with high power strategies. Rubin and Mills (1992) showed that children's externalizing behaviors elicited more parental anger and high power parenting, as compared to social withdrawal. Future research should continue to explore other factors, such as emotion, which influence the relationship between parental beliefs and children's externalizing behaviors.

Summary

The purpose of this study was to extend the previous research on maternal beliefs by utilizing older children (8-12 years) and including mothers of children from a clinical setting. The relationships between maternal beliefs (parenting, goals, hostile attributions, and perceived control) about children's externalizing behaviors and the frequency of their children's externalizing behaviors were investigated. The results suggest many potentially interesting avenues for future exploration.

Many of the maternal beliefs (authoritarian parenting, parent-centered goals, relationship-centered goals, attributions, and parental control) were significantly related to children's externalizing behaviors in many of the analyses, especially in the clinic and combined groups.

The clinic and combined groups were more likely to reveal significant findings even after the variance due to group membership was accounted for, presumably because of the wider range of externalizing behaviors provided.

Interestingly, the results applied to both girls and boys, since a significant gender effect was not found. Further, permissive and authoritative parenting did not significantly predict children's externalizing behaviors for any of the groups. While it may be that only authoritarian parenting predicts children's misbehaviors during middle childhood, findings should be interpreted with caution until they are replicated in future studies.

The especially strong relationship between mothers' Parental Control Scale and their children's externalizing behavior scores should be noted. A lack of perceived parental control may interact with mothers' attributions, parent-centered goals, relationship-centered goals and parenting. Given that several maternal beliefs predicted children's externalizing behavior scores, over and above parenting style, future investigations regarding parental beliefs could provide further insight into this complex dynamic.

Since the results generally indicated that mothers' cognitions and interpretations of their children's

misbehaviors may be predictive of children's externalizing behavior scores, clinical implications emerge. Parent counseling programs might include assessing parental beliefs in order to assist parents to heighten their cognitive insight into the relationship between their beliefs and their parenting behavior, which ultimately may contribute to their children's social development.

The interaction between parent and child is complex and parent beliefs are certainly not the only variable predictive of children's externalizing behavior difficulties. However, parent workshops and clinical intervention may at least reduce the risk of parental beliefs being one of the contributing variables to the frequency of the child's misbehaviors.

Figure 1. Frequency of total parent-centered scores.

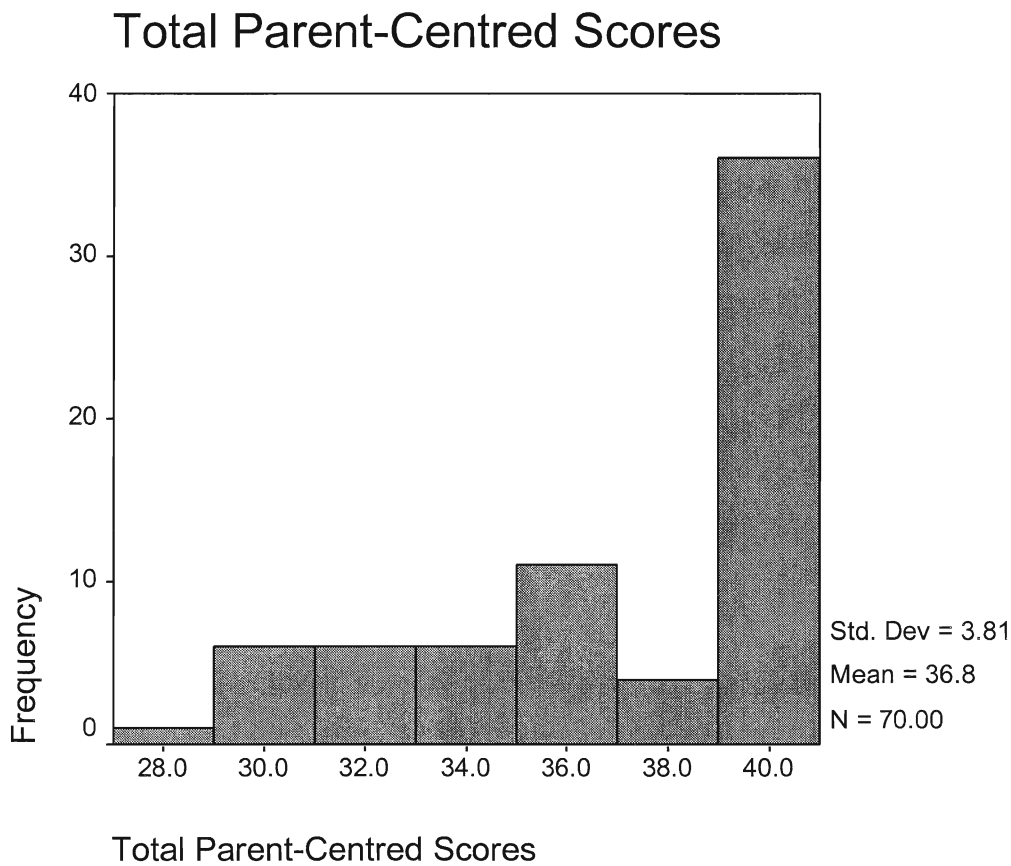
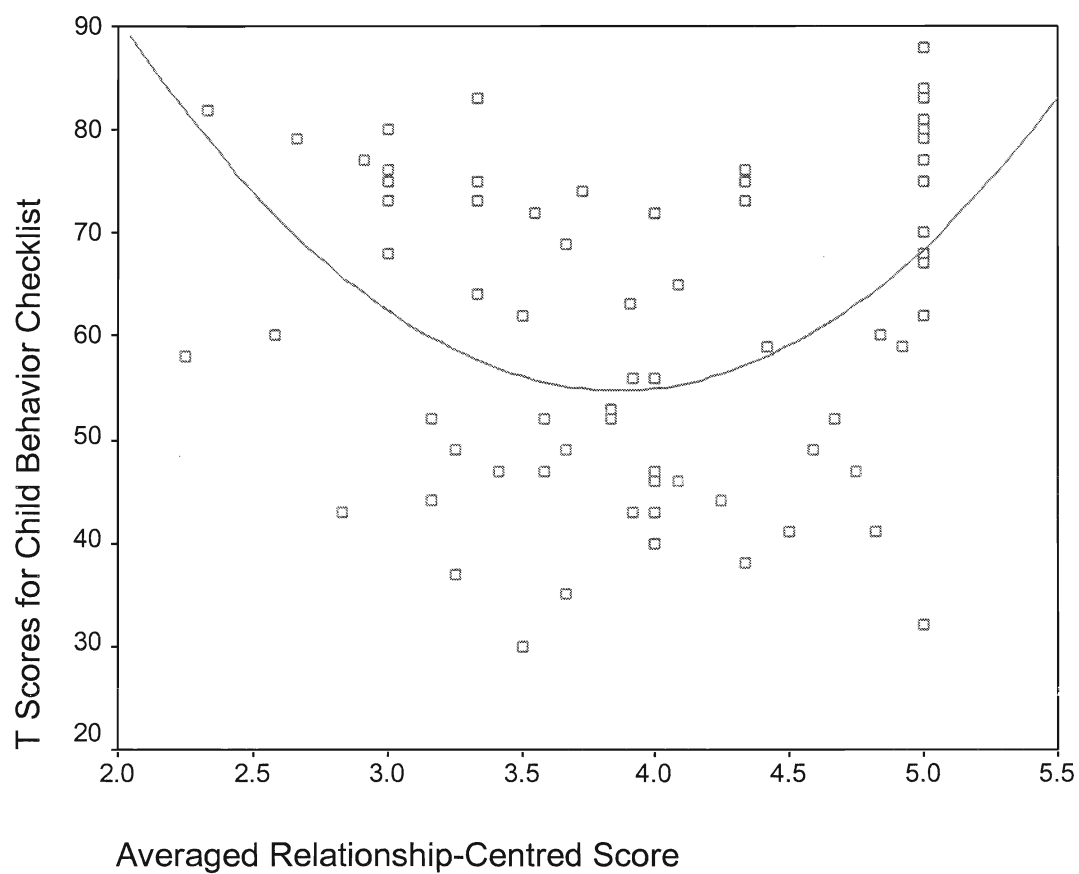


Figure 2. The curvilinear relationship between mothers' parent-centered scores and children's externalizing behavior scores.



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Footnotes

- 1 For the purpose of this study, mothers' reported emotions (angry, happy, responsible, embarrassed) were not analyzed.

Appendix A1

Brock University Department of Psychology
Children's Clinic Information Letter

As most parents know, dealing with children's misbehaviors can be a difficult task! Recent research has showed that parents' beliefs and thoughts about children's misbehaviors are connected to how parents handle these situations.

To add to our understanding of this interesting topic, I am asking for your help. I am a Masters psychology student at Brock University and I am conducting a study looking at mothers' beliefs and thoughts about children's behaviors, such as defiance and aggression. I am studying mothers' beliefs since, in past research, mothers have been more willing to participate than fathers. If the father of your child would like to participate in this study, I would be happy to provide you with another copy of the questionnaire booklet.

You can help in this project by completing a questionnaire booklet. One of the questionnaires asks about whether a list of misbehaviors applies to your child and how often. The remaining four questionnaires included are simple-to-answer questions about how you think and feel about various children's misbehaviors. The entire booklet should take you approximately one-half of an hour to complete. You may fill it out at Children's Clinic, or you may take it home instead, whichever is most convenient to you. If you choose to take it home to complete, I will provide postage-paid envelope. In appreciation of your participation, I am offering a \$2.00 Tim Horton's gift certificate upon return of the questionnaire booklet.

Your participation is completely voluntary and you may choose not to participate without penalty. Participation will not affect your child's treatment at the Children's Clinic. All of the information that I collect is strictly confidential. My results and reports will be based on group data and individuals will not be identified. Data will be stored for 5 years and then will be shredded.

At the end of my study, I would be happy to send you a summary of the results if you are interested.

If you have any questions or concerns about my study, please contact myself, Sherry Campbell (905-684-7271, extension 6410), or my supervisor, Dr. Linda Rose-Krasnor in the Psychology Department at Brock University (905-688-5550, extension 3870). Inquiries may also be directed to Brock University's Research Office (905-688-5550, extension 3035). Since the questionnaires ask about children's misbehaviors, you may have additional concerns or questions about your child. Feel free to contact the intake social worker if this occurs (905-684-7271, extension 6573).

If you agree to participate, please sign the consent form provided. Otherwise, please return it to me unsigned. Thank you for considering my request. Through the cooperation of mothers such as yourself, we are able to learn more about ourselves as parents and our children.

Thank You!

Sherry Campbell, Researcher

Appendix A2

Brock University Psychology Department
Children's Clinic Informed Consent Letter

Title of Study: Parental Beliefs as Predictors of Children's
Externalizing Behaviors

Researcher: Sherry Campbell; Supervising Professor: Dr. Linda Rose-
Krasnor

I have been informed that the study in which I am to participate is
investigating parents' thoughts about children's misbehaviors. I
understand that I will be asked to complete a questionnaire package,
which will require approximately one-half of an hour of my time.

I understand that my questionnaires' responses will be kept strictly
confidential. All reports are based on group data and presented so
that individuals cannot be identified.

I also understand that my participation is voluntary and I may choose
not to participate without penalty. My participation will not
influence my child's treatment at the Children's Clinic.

I will be free to ask any questions about the study and I may withdraw
from the study at any time without prejudice. If I feel uncomfortable
answering any particular question, for whatever reason, I may refuse to
answer it. If I have questions or concerns regarding my child, I may
contact my intake social worker (905-684-7271, extension 6573).

Upon completion of the questionnaire booklet, I will personally return
it to the researcher or mail it in the postage-paid envelope provided,
which ever is most convenient for me. I understand that in
appreciation of my participation, I will receive a \$2.00 Tim Horton's
gift certificate upon return of the questionnaire booklet.

I hereby give my written consent to participate in this study.

I, _____ (please print name) have read and understood
the above statements.

Parent Signature _____ Date: _____

This study has been reviewed and approved by the Brock Research Ethics
Board (File # 01-179) and the Niagara Health System Research Ethics
Board.

If you have any questions or concerns, you may contact the researcher,
Sherry Campbell (905-684-7271, ext. 6410) or Dr. Linda Rose-Krasnor
(905-688-5550, extension 3870). You may also contact the Brock
Research Ethics Board (905-688-5550, extension 3035) or Niagara Health
System Ethics Board committee, Chairman, Brent Kerwin (905-684-7271,
extension 4545).

At the end of the study, a summary report of the results will be
available. If you are interested in receiving a copy please check
here () and provide mailing address on the back of this form.

Appendix A3

Brock University Psychology Department
Letter of Appreciation

Title of Study: Parental Beliefs as Predictors of Children's
Externalizing Behaviors

Researcher: Sherry Campbell; Supervising Professor: Dr. Linda Rose-
Krasnor

I would like to take this opportunity to thank you for your time and effort in completing my questionnaire booklet! I hope that you found some of the questions interesting. As a gesture of my appreciation, please accept the enclosed \$2.00 Tim Horton's gift certificate.

If requested, I will send you a summary of the results when the study is completed.

The connection between parents' beliefs and thoughts about children's misbehaviors has received more attention in the research lately. It has been shown that parents' beliefs influence how they handle their children's difficult behaviors. Studies such as this one help researchers understand which specific beliefs best predict children's social competence.

Most of the questionnaires gave examples of situations when children misbehave and then asked you what you thought or felt about those situations. If you are feeling any upset or concern because of completing the questionnaires, please contact the intake social worker from the Children's Clinic to further discuss these feelings (905-684-7271, extension 6573).

Parenting children is a difficult job, especially in situations when our children are defiant and aggressive. Due to the cooperation of mothers such as you, we are all able to learn more about ourselves as parents and our children.

Thank You,

Researcher: Sherry Campbell

905-684-7271, extension 6410

Supervising Professor: Dr. Linda Rose-Krasnor

905-688-5550, extension 3870

Appendix B1

Brock University Department of Psychology
School Information Letter

As most parents know, dealing with children's misbehaviors can be a difficult task! Recent research has showed that parents' beliefs and thoughts about children's misbehaviors are connected to how parents handle these situations.

To add to our understanding of this interesting topic, I am asking for your help. I am a Masters psychology student at Brock University and I am conducting a study looking at mothers' beliefs and thoughts about children's behaviors, such as defiance and aggression. I am studying mothers' beliefs since in past research mothers have been more willing to participate. If the father of your child would like to participate in this study, I would be happy to provide a copy of the questionnaire booklet.

You can help in this project by completing a questionnaire booklet. One of the questionnaires asks about whether a list of misbehaviors applies to your child and how often. The remaining four questionnaires included are simple-to-answer questions about how you think and feel about various children's misbehaviors. It should take you approximately one-half of an hour to complete. You may fill it out at the school, or you may take it home instead, whichever is most convenient to you. If you choose to take it home to complete, I will provide postage-paid envelope. In appreciation of your participation, I am offering a \$2.00 Tim Horton's gift certificate upon return of the questionnaire booklet.

Your participation is completely voluntary and you may choose not to participate without penalty. Participation will not affect your child's school grades. All of the information that I collect is strictly confidential. My results and reports will be based on group data and individuals will not be identified.

At the end of my study, I would be happy to send you a summary of the results if you are interested.

If you have any questions or concerns about my study, please contact myself, Sherry Campbell (905-894-3084), or my supervisor, Dr. Linda Rose-Krasnor in the Psychology Department at Brock University (905-688-5550, extension 3870).

If you agree to participate, please sign the consent form provided. Otherwise, please return it to me unsigned. Thank you for considering my request. Through the cooperation of mothers such as yourself, we are able to learn more about ourselves as parents and our children.

Thank You!

Sherry Campbell
Researcher.

Appendix B2

Brock University Psychology Department
School Informed Consent Letter

Title of Study: Parental Beliefs as Predictors of Children's
Externalizing Behaviors

Researcher: Sherry Campbell; Supervising Professor: Dr. Linda Rose-
Krasnor

I have been informed that the study in which I am to participate is
investigating parents' thoughts about children's misbehaviors. I
understand that I will be asked to complete a questionnaire package,
which will require approximately one-half of an hour of my time.

I understand that my questionnaires' responses will be kept strictly
confidential. All reports are based on group data and presented so
that individuals cannot be identified.

I also understand that my participation is voluntary and I may choose
not to participate without penalty.

I will be free to ask any questions about the study and I may withdraw
from the study at any time without prejudice. My participation will
not affect my child's school grades. If I feel uncomfortable answering
any particular question, for whatever reason, I may refuse to answer
it.

Upon completion of the questionnaire booklet, I will personally return
it to the school or mail it in the postage-paid envelope provided which
ever is most convenient for me. I understand that in appreciation of
my participation, I will receive a \$2.00 Tim Hortons gift certificate
upon return of the questionnaire booklet.

** This study has been approved by the Brock Research Ethics Board
(File # 01-179) and the District School Board of Niagara Ethics Board.
This study has been approved by your child's principal.

** If you have any questions or concerns, you may contact the
researcher, Sherry Campbell (905-684-7271, ext. 6410) or Dr. Linda
Rose-Krasnor (905-688-5550, extension 3870), or Brock University
Research Office (905-688-5550, ext. 3035). You may also contact your
school principal.

I hereby give my written consent to participate in this study.

I, _____ (please print name) have read and understood
the above statements.

Parent Signature _____ Date: _____

At the end of the study, a summary report of the results will be
available. If you are interested in receiving a copy please check here
() and provide a mailing address on the back of this form.

Appendix B3

Brock University Psychology Department
Letter of Appreciation

Title of Study: Parental Beliefs as Predictors of Children's
Externalizing Behaviors

Researcher: Sherry Campbell; Supervising Professor: Dr. Linda Rose-
Krasnor

I would like to take this opportunity to thank you for your time and effort in completing my questionnaire booklet! I hope that you found some of the questions interesting. As a gesture of my appreciation, please accept the enclosed \$2.00 Tim Horton's gift certificate.

If requested, I will send you a summary of the results when the study is completed.

The connection between parents' beliefs and thoughts about children's misbehaviors has received more attention in the research lately. It has been shown that parents' beliefs influence how they handle their children's difficult behaviors. Studies such as this one help researchers understand what beliefs best predict children's social competence.

Most of the questionnaires gave examples of when children misbehave and then asked you what you thought and felt about these situations. Please see a list attached of local agencies that you may contact if you feel concerned or upset because of completing the questionnaires.

Parenting children is a difficult job, especially in situations when our children are defiant and aggressive. Due to the cooperation of mothers such as you, we are all able to learn more about ourselves as parents and our children.

Thank You,

Researcher: Sherry Campbell

(905) 684-7271, extension 6410

Supervising Professor: Dr. Linda Rose-Krasnor

905-688-5550, extension 3870

Appendix B4

Contact Agencies

Children's Clinics Niagara Health System Hospital Sites:

Greater Niagara General Site	905-358-0171
Welland Site	905-732-6111
St. Catharine's Site	905-684-7271

Niagara Child Development Centre:

RR#2, Welland	905-384-9551
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Family Counselling Centre	905-937-7731
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** You may also direct questions/concerns to your child's school youth worker.

Appendix C1

Demographic Questionnaire

Some basic information about you and your child is needed for this study. Please complete the following:

Child Information:

Child's First Name: _____

Birthdate (day/month/year) ____/____/____

Gender: () Male () Female

Grade in School: _____

Names of Siblings and their ages (if any):

1. _____
2. _____
3. _____
4. _____

Child Checklist:

Please check if any of these apply to your child:

- | | |
|---|-------------------------|
| () CAP (central auditory) | () speech disability |
| () learning disability | () developmental delay |
| () autism | () head injury |
| () ADD (attention deficit disorder) | if yes, explain: |
| () ADHD (attention deficit hyperactivity disorder) | |

Mother's Information:

Mother's Name: _____

Mother's Age: _____

Mother's Education Level: *circle highest level completed*

- | | |
|----------------------|--------------------------|
| a. elementary school | d. university (BA) |
| b. high school | e. university (Masters) |
| c. college | f. university (Ph.D.) |
| | g. other: please specify |

Marital Status:

- a. single, never been married
- b. married/common-law
- c. separated/divorced/widowed

Thank you for completing this questionnaire!

Appendix C2

Child Behavior Vignettes - Revised

Instructions:

There are four brief stories in this part of the questionnaire. Each story describes a child engaging in some type of behavior. As you read each story, please imagine that it is your child being described. Maybe something like this has happened before, and you can remember how you felt and what you did. If nothing like what is described in a story has happened before, please imagine what it would be like to be in that situation and see your child behaving that way.

After each story there are 15 questions. Each of these describes a thought or feeling you may have if you saw your child behaving that way. With each one, there is a 5-point rating scale. After you read an item, please use the scale to rate how much you agree with that item. For example, if you would want your child to behave properly right away, and this was very important to you, you might rate that item as a 4 or 5 out of 5.

Please try to answer every question. If you're not sure about any of the items, just take your best guess. Please try to mark the first answer that comes to your mind. Also, we're interested in what you think, and what you do, so please don't talk about the other stories and questions with other people until after you have given us your answers.

Thank You!!

Story One:

One afternoon you go to pick up your child from his/her school. When you get there, your child is in the playground with some other children. One of the other children has something your child wants, and you see your child grab it and push the other child down. You have seen your child do this a few times before.

The following five items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from

1: Not at all important, to 5: Extremely Important

1. I would want my child to behave properly, right away.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

2. I would want my child to feel good, or to be happy.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

3. I would want my child to know that I love him/her, and he/she can love and trust me.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

4. I would want my child to understand that I expect him/her to behave properly.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

5. I would want my child and I both to feel good about this situation.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

The following four items describe reasons why you think your child may have behaved in the way described in this story.
Please rate each from 1 to 5.

6. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely	mostly	equally due	mostly	completely
due to	due to	to both	due to	due to
personality	personality		situation	situation

7. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
did this	did this	either	did not	did not mean
purpose	on purpose		mean to do	to do this.
			this	

8. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
a stage	a stage	either way	will act	will act
that will	that will		this way	this way
pass	pass		in future	in future

9. This behavior is typical of my child or my child never acts this way.

1	2	3	4	5
this is just	my child	my child	this does	my child
like how	acts this	could act	not sound	never acts
my child	way	this way	much like	this way.
Behaves	sometimes		my child	

10. The following six items describe possible choices of what you might do in this situation. Please put a #1 with the choice that best describes what you might do, and a #2 for the choice that next best describes what you might do.

- | | |
|--|--|
| () Punish the child
e.g., take away privileges | () Withdraw attention
e.g., walk away |
| () Reason with the child
e.g., explain | () Help child to resolve
the situation and how
to do better in future |
| () Yell at the child | () Let children handle the
situation by themselves |

The following five items describe emotions that you might feel in this situation. Please rate how strongly you would feel each emotion from 1: Not at all, to 5: very strong

		Not at all	Little	Medium	Strong	Very Strong
11.	Angry	1	2	3	4	5
12.	Happy	1	2	3	4	5
13.	Responsible	1	2	3	4	5
14.	Embarrassed	1	2	3	4	5
15.	Worried	1	2	3	4	5

Story Two

One late afternoon, your child asks for your permission to go over to a friend's house. You ask your child if he/she has completed the day's homework and he/she replies, "Yes, it's done". Before he/she leaves, you discover that the homework has not been completed.

The following five items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

2. I would want my child to feel good, or to be happy.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

3. I would want my child to know that I love him/her, and he/she can love and trust me.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

4. I would want my child to understand that I expect him/her to behave properly.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

5. I would want my child and I both to feel good about this situation.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

The following four items describe reasons why you think you child may have behaved in the way described in this story. Please rate each one from 1 to 5.

6. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely	mostly	equally due	mostly	completely
due to	due to	to both	due to	due to
personality	personality		situation	situation

7. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
did this	did this	either way	did not	did not
on	on		mean to	mean to
purpose	purpose		to do this	do this

8. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
a stage	a stage	either way	will act	will act
that will	that will		this way	this way
pass	pass		in future	in future

9. This behavior is typical of my child or my child never acts this way.

1	2	3	4	5
this is just	my child	my child	this does	my child
like how	acts this	could act	not sound	never acts
my child	way	this way	like my	this way
behaves	sometimes		my child	

10. The following six items describe possible choices of what you might do in this situation. Please put a #1 with the choice that best describes what you might do, and a #2 with the choice that next best describes what you might do.

- | | |
|--|--|
| () Punish the child
e.g., take away privileges | () Withdraw attention
e.g., walk away, ignore |
| () Reason with the child
e.g., explain | () Help child to resolve
the situation and how
to do better in future |
| () Yell at the child | () Let the children handle
the situation themselves |

The following five items describe emotions that you might feel in this situation. Please rate how strongly you would feel each emotion from 1: Not at all, to 5: very strong.

	Not at All	Little	Medium	Strong	Very strong
11. Angry	1	2	3	4	5
12. Happy	1	2	3	4	5
13. Responsible	1	2	3	4	5
14. Embarrassed	1	2	3	4	5
15. Worried	1	2	3	4	5

Story Three

One afternoon you go to pick up your child from a club meeting. You see your child sitting and laughing with his/her friends. You hear another child, from a short distance away, repeatedly calling out your child's name to get his/her attention. You notice that your child looks at the other child and does not respond.

The following five items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely Important

1. I would want my child to behave properly, right away.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

2. I would want my child to feel good, or to be happy.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

3. I would want my child to know that I love him/her, and he/she can love and trust me.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

4. I would want my child to understand that I expect him/her to behave properly.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

5. I would want my child and I both to feel good about this situation.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

The following four items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

6. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely	mostly	equally due	mostly	completely
due to	due to	to both	due to	due to
personality	personality		situation	situation

7. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
did this on	did this	either way	did not	did not mean
purpose	on		mean to	to do this
	purpose		do this	

8. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
a stage	a stage	either	will act	will act
that will	that will	way	this way	this way
pass	pass		in future	in future

9. This behavior is typical of my child or my child never acts this way.

1	2	3	4	5
this is just	my child	my child	this does not	my child
like how	acts this	could act	sound much	never
my child	way	this way	like my	acts this
behaves	sometimes		child	way

10. The following six items describe possible choices of what you might do in this situation. Please put a #1 with the choice that best describes what you might do, and a #2 for the choice that next best describes what you might do.

- | | |
|--|--|
| () Punish the child
e.g., take away privileges | () Withdraw attention
e.g., walk away |
| () Reason with the child
e.g., explain | () Help child to resolve
situation and how to
do better in future |
| () Yell at the child | () Let the children handle
the situation themselves |

The following five items describe emotions that you might feel in this situation. Please rate how strongly you would feel each emotion from 1: not at all, to 5: very strong.

	Not at all	Little	Medium	Strong	Very Strong
11. Angry	1	2	3	4	5
12. Happy	1	2	3	4	5
13. Responsible	1	2	3	4	5
14. Embarrassed	1	2	3	4	5
15. Worried	1	2	3	4	5

Story Four

One day, you and your child are at home and you are expecting some friends to drop by soon. You look in the front room of your home, and your child's video games are all over the floor. Your child is watching TV. You ask your child to pick up his/her toys, and your child says, "Later, when this show is over." You ask your child to pick his/her games up now, and your child says, "You're not being fair."

The following five items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

2. I would want my child to feel good, or to be happy.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

3. I would want my child to know that I love him/her, and he/she can love and trust me.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

4. I would want my child to understand that I expect him/her to behave properly.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

5. I would want my child and I both to feel good about this situation.

1	2	3	4	5
not at all	a little	moderately	very	extremely
important	important	important	important	important

The following four items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

6. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely	mostly	equally due	mostly	completely
due to	due to	to both	due to	due to
personality	personality		situation	situation

7. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
did this	did this	either way	did not	did not
on	on		mean to	mean to
purpose	purpose		do this	do this

8. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely	probably	it could	probably	definitely
a stage	a stage	be	will act	will act
that will	that will	either way	this way	this way
pass	pass		in future	in future

9. This behavior is typical of my child or my child never acts this way.

1	2	3	4	5
this is	my child	my child	this does	my child
just like	acts this	could act	not sound	never acts
how my	way	this way	much like	this way
behaves.	Sometimes		my child	

10. The following six items describe possible choices of what you think you might do in this situation. Please put a #1 with the choice that best describes what you might do, and a #2 for the choice that next best describes what you might do.

- | | |
|--|--|
| () Punish the child
e.g., take away privileges | () Withdraw attention
e.g., walk away |
| () Reason with the child
e.g., explain | () Help child to resolve
the situation and how to
do better in the future |
| () Yell at the child | () Let the children handle
situation themselves |

The following five items describe emotions that you might feel in this situation. Please rate how strongly you would feel each emotion from 1: not at all, to 5: very strong.

	Not at all	Little	Medium	Strong	Very Strong
11. Angry	1	2	3	4	5
12. Happy	1	2	3	4	5
13. Responsible	1	2	3	4	5
14. Embarrassed	1	2	3	4	5
15. Worried	1	2	3	4	5

Thank you for completing this questionnaire!

- Permission provided by Paul Hastings and Robert Coplan to use the Child Behavior Vignettes (CBV) measure.
- CBV-R (Campbell & Rose-Krasnor, 2001)

Appendix C3

Parental Authority Questionnaire--Modified Version

Please read each of the following statements carefully. Circle the number to the right that most closely fits how you feel about each statement. In each case 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

1. I feel that in a well run home the children should have their way in the family as often as the parents do. 1 2 3 4 5
2. Even if my children disagree with me, I feel that it is for their own good if I force them to conform to what I think is right. 1 2 3 4 5
3. Whenever I tell my children to do something, I expect them to do it immediately without asking questions. 1 2 3 4 5
4. Once family policy has been established, I discuss the reasoning behind the policy with my children. 1 2 3 4 5
5. I always encourage verbal give-and-take whenever my children feel the family rules and restrictions are unreasonable. 1 2 3 4 5
6. I feel that what children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what I might want. 1 2 3 4 5
7. I do not allow my children to question any decision I make. 1 2 3 4 5
8. I direct the activities and decisions of my children through reasoning and discipline. 1 2 3 4 5
9. I feel that more force should be used by parents in order to get children to behave the way they are supposed to. 1 2 3 4 5
10. I do not feel that children need to obey rule and regulations of behavior simply because someone in authority has established them. 1 2 3 4 5
11. I feel children should know what is expected of them in the family, but they should feel free to discuss those expectations when they feel that they are unreasonable. 1 2 3 4 5
12. I feel that wise parents should teach their children early just who is boss in the family. 1 2 3 4 5
13. I seldom give my children expectations and guidelines for their behavior. 1 2 3 4 5

14. Most of the time I do what my children want when making family decisions. 1 2 3 4 5
15. I consistently give direction and guidance to my children in a rational and objective way. 1 2 3 4 5
16. I get very upset if my children try to disagree with me. 1 2 3 4 5
17. I feel that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires as they grow up. 1 2 3 4 5
18. I let my children know what behavior I expect of them, and if they don't meet those expectations, I punish them. 1 2 3 4 5
19. I let my children decide most things for themselves without a lot of direction from me. 1 2 3 4 5
20. I take my children's opinions into consideration when making decisions, but I won't decide for something simply because the children want it. 1 2 3 4 5
21. I do not view myself as responsible for directing and guiding my children's behavior as they grow up. 1 2 3 4 5
22. I have clear standards for my children, but I am willing to adjust those standards to the needs of each of my individual children. 1 2 3 4 5
23. I give my children direction for their behavior and I expect them to follow my direction, but, I am willing to listen to their concerns and to discuss that direction with them. 1 2 3 4 5
24. I allow my children to form their own point of view on family matters and generally I allow them to decide for themselves what to do. 1 2 3 4 5
25. I feel that most problems in society would be solved if we could get parents to strictly and forcibly deal with their own children when they don't do what they are supposed to do. 1 2 3 4 5
26. I often tell my children exactly what I want them to do and how I expected them to do it. 1 2 3 4 5
27. I give my children clear direction for the behaviors and activities, but I also understand when they disagree with me. 1 2 3 4 5
28. I do not direct the behaviors, activities and desires of my children. 1 2 3 4 5
29. My children know what I expect of them and I insist that they conform to my expectations simply out of respect

- for my authority. 1 2 3 4 5
30. If I make a decision in the family that hurts my
children, I am willing to discuss that decision with
them and to admit that I made a mistake. 1 2 3 4 5

Thanks for completing this questionnaire!!

** Buri, J.R. (1991). Parental authority questionnaire. Journal of Personality Assessment 57(1), 110-119.

Appendix-C4

Parental Control Scale:Parental Locus of Control Questionnaire

There are 10 statements in this questionnaire. Each statement describes a thought or feeling you may have about being a parent. With each one, there is a 5 point rating scale. After you read each statement, please use the scale to rate how much you agree with that item. For example, a rating of 1 (low) would mean that you do not agree with the statement. Please try to answer every question. If you're not sure about any of the items, just take your best guess.

1. I always feel in control when it comes to my child.

1	2	3	4	5
low	low-med	medium	med-high	high

2. My child's behavior is sometimes more than I can handle.

1	2	3	4	5
low	low-med	medium	med-high	high

3. Sometimes I feel that my child's behavior is hopeless.

1	2	3	4	5
low	low-med	medium	med-high	high

4. It is often easier to let my child have his/her way than to put up with a tantrum.

1	2	3	4	5
low	low-med	medium	med-high	high

5. I find that sometimes my child can get me to do things I really did not want to do.

1	2	3	4	5
low	low-med	medium	med-high	high

6. My child often behaves in a manner very different from the way I would want him/her to behave.

1	2	3	4	5
low	low-med	medium	med-high	high

7. Sometimes when I am tired I let my child do things I normally wouldn't.

1	2	3	4	5
low	low-med	medium	med-high	high

8. Sometimes I feel that I do not have enough control over the direction my child's life is taking.

1	2	3	4	5
low	low-med	medium	med-high	high

9. I allow my child to get away with things.

1	2	3	4	5
low	low-med	medium	med-high	high

10. It is not too difficult to change my child's mind about something.

1	2	3	4	5
low	low-med	medium	med-high	high

Thank you for completing this questionnaire!

** Campis, L.K., Lyman, R.D., & Prentice-Dunn, S. (1986). The parental locus of control scale: Development and validation. Journal of Clinical Child Psychology, 15(3), 260-267.

Appendix C5 EXTERNALIZING BEHAVIOR CHECKLIST
 REVISED FROM:
 CHILD BEHAVIOR CHECKLIST FOR AGES 4-18
 (ACHENBACH, 1998)

Below is a list of items that describe children. For each item that describes your child now or within the past 6 months, please circle the 2 if the item is **very true** or **often true** of your child. Circle the 1 if the item is **somewhat** or **sometimes true** of your child. If the item is **not true** of your child, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to your child.

- ```
0 = not true (as far as you know)
1 = somewhat or sometimes true
2 = very true or often true
```

- |   |   |   |                                               |
|---|---|---|-----------------------------------------------|
| 0 | 1 | 2 | argues a lot                                  |
| 0 | 1 | 2 | bragging, boasting                            |
| 0 | 1 | 2 | cruelty, bullying, or meanness to others      |
| 0 | 1 | 2 | demands a lot of attention                    |
| 0 | 1 | 2 | destroys his/her own things                   |
| 0 | 1 | 2 | disobedient at home                           |
| 0 | 1 | 2 | disobedient at school                         |
| 0 | 1 | 2 | doesn't seem to feel guilty after misbehaving |
| 0 | 1 | 2 | easily jealous                                |
| 0 | 1 | 2 | gets in many fights                           |
| 0 | 1 | 2 | hangs around with children who get in trouble |
| 0 | 1 | 2 | lying or cheating                             |
| 0 | 1 | 2 | physically attacks people                     |
| 0 | 1 | 2 | prefers playing with older children           |



Page 2

0 = not true (as far as you know)  
 1 = somewhat or sometimes true  
 2 = very true or often true

|   |   |   |                                               |
|---|---|---|-----------------------------------------------|
| 0 | 1 | 2 | runs away from home                           |
| 0 | 1 | 2 | screams a lot                                 |
| 0 | 1 | 2 | sets fires                                    |
| 0 | 1 | 2 | showing off or clowning                       |
| 0 | 1 | 2 | steals at home                                |
| 0 | 1 | 2 | steals outside the home                       |
| 0 | 1 | 2 | stubborn, sullen, or irritable                |
| 0 | 1 | 2 | sudden changes in mood or feelings            |
| 0 | 1 | 2 | swearing or obscene language                  |
| 0 | 1 | 2 | talks too much                                |
| 0 | 1 | 2 | teases a lot                                  |
| 0 | 1 | 2 | temper tantrums or hot temper                 |
| 0 | 1 | 2 | thinks about sex too much                     |
| 0 | 1 | 2 | threatens people                              |
| 0 | 1 | 2 | truancy, skips school                         |
| 0 | 1 | 2 | unusually loud                                |
| 0 | 1 | 2 | uses alcohol or drugs for non-medical reasons |
| 0 | 1 | 2 | vandalism                                     |

\*\* The originals have been purchased through the Assessment Resource Centre.

**t palmer**

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**From:** "Deborah Van Oosten" <deborah.vanoosten@brocku.ca>  
**To:** <tpalmer2@cogeco.ca>; <lrosekra@spartan.ac.BrockU.CA>  
**Cc:** <engemann@ed.BrockU.CA>; <mowen@spartan.ac.BrockU.CA>  
**Sent:** Thursday, December 05, 2002 4:44 PM  
**Subject:** REB 02-179, Campbell - renewal approved

**Senate Research Ethics Board  
 Room AS 302**

**Extensions 3943/3035,**

**FROM:** Joe Engemann, Chair  
 Senate Research Ethics Board (REB)

**TO:** Linda Rose-Krasnor, Psychology  
 Sherry Campbell

**RE:** **Continuing Review/Final Report**

*File #: 01-179*

*Researchers: Campbell*

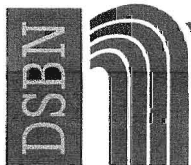
*Originally Accepted: March 6, 2002*

Estimated Date of Completion: **December 30, 2002**

**DATE:** **December 5, 2002**

Thank you for completing the *Continuing Review/Final Report* form. The Brock University Research Ethics Board has reviewed this report for:

*Parental Beliefs as Predictors of Children's Externalizing Behaviour*



# District School Board of Niagara

191 Carlton Street, St. Catharines, Ontario L2R 7P4  
William R. McLean, Director of Education and Secretary

(905) 641 1550

Fax: (905) 685-8511

March 18, 2002

Ms. S. Campbell,  
56 Pleasant Ave. S.,  
Ridgeway, Ontario.  
L0S 1N0

Dear Ms. Campbell:

On Tuesday, March 12, 2002, the District School Board of Niagara accepted the recommendation to approve your request to conduct the research project "Parental Beliefs as Predictors of Children's Externalizing Behaviours".

Please be reminded that the conditions are connected with this approval:

- prior to the commencement of the research process, you will be required to sign an "Agreement to Conduct Research in the District School Board of Niagara" form;
- school participation will be voluntary and approved by the Principal of the school in consultation with staff;
- the research project must be conducted within the proposed framework as submitted. Should modifications to the proposal be required/desired, it will be necessary to resubmit the proposal for consideration;
- the approval is granted for the period February to June, 2002;
- an interim report, indicating school participation and progress to date, should be forwarded to the undersigned no later than May 15, 2002;
- upon completion of the research project a final report should be forwarded to the principals of the participating schools and to the undersigned; and
- this letter must be presented to the school principal when inviting school participation in the project.

On behalf of the District School Board of Niagara, I wish you well in this research project and look forward to reviewing your interim and final reports.

Sincerely yours,

A handwritten signature in dark ink, appearing to read 'J. Sharpe', is written over the typed name.

J. Sharpe,  
Superintendent of Schools/Curriculum

/scm

For: Campbell, Sherry A.

From: Brent Kerwin

Tue Feb 12, 2002 3:37 pm

Taken by: Brent Kerwin (4545)

Please be advised that your study proposal was approved as presented.

-----  
SENT TO: Dorothy Tapp, Sherry A. Campbell